BLM

United States Department of the Interior
Bureau of Land Management

Environmental Assessment

DOI-BLM-CO-S050-2015-0006-EA

June 2015

Paradox Trail Reroute

Location: T 47N, R 15W, Sec. 22, 23, 26, 27, 30, 32-35

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ENVIRONMENTAL ASSESSMENT

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PROJECT NAME: Paradox Trail Reroute

LEGAL DESCRIPTION: T 47N, R 15W, Sec. 22, 23, 26, 27, 30, 32-35

APPLICANT: Montrose West Recreation

INTRODUCTION and BACKGROUND
The Bureau of Land Management (BLM) Uncompahgre Field Office (UFO) has prepared this environmental assessment (EA) to disclose and analyze the environmental effects of a reroute on the Paradox Trail.

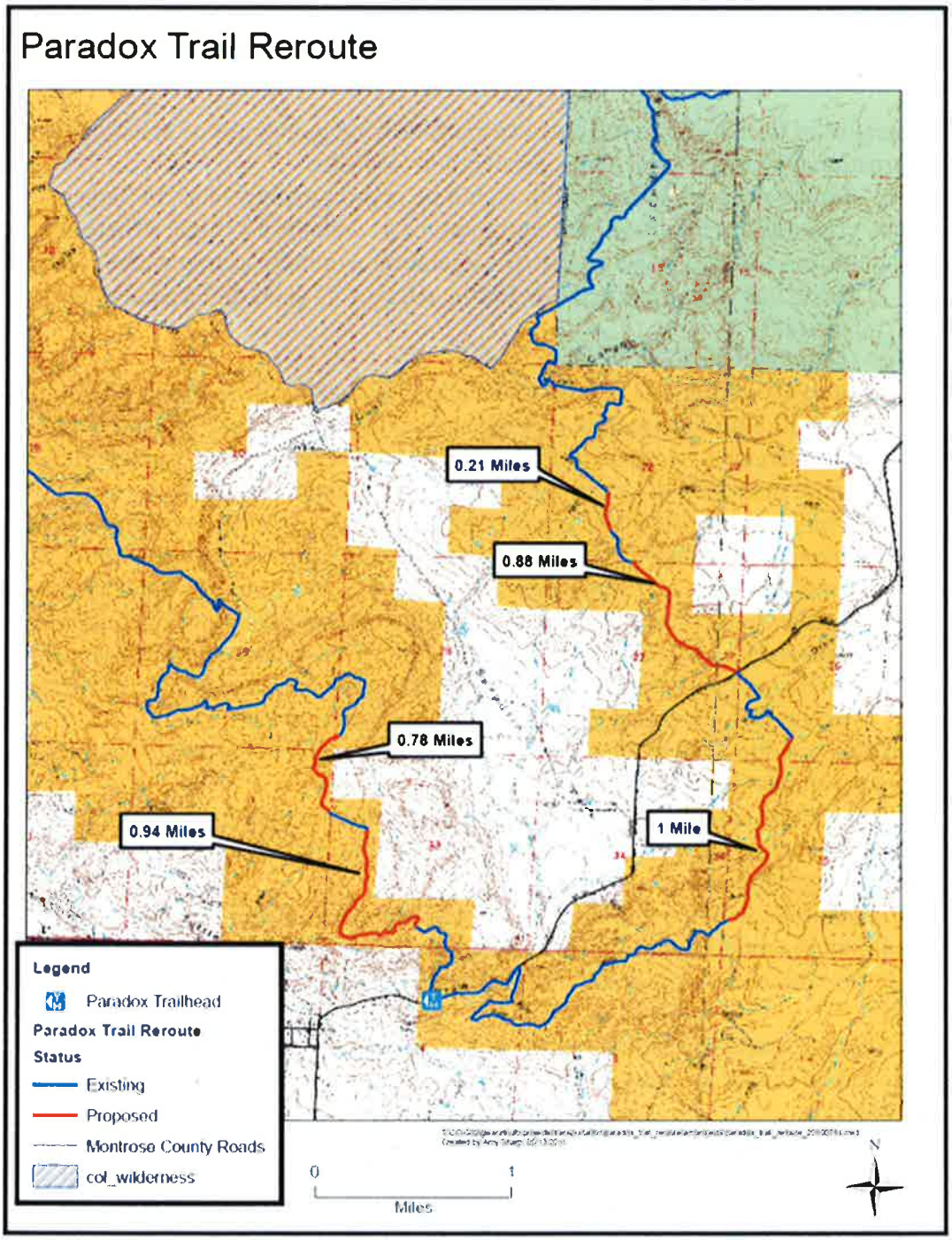
The Paradox Trail links the Tabeguache Trail on the Uncompahgre Plateau and Kokopelli's Trail in the La Sal Mountains of Utah. The Paradox Trail traverses over 100 miles through a wide variety of terrain, elevation and ecological zones. Most of its length follows existing jeep and county roads, as well as some single-track trail. It travels near or through numerous towns including Nucla, Uravan, and Paradox.

PURPOSE AND NEED FOR THE ACTION:
The purpose of this trail project is to present and analyze a reroute of the Paradox Trail to address trespass issues, encroachment of motorized and mechanized trails into the Tabeguache Area, and proliferation of user-created routes. According to the Uncompahgre Field Office-wide Travel Management Plan Amendment (2010), adaptive management practices include making changes to the route network as necessary including adding routes and trailhead facilities.

Decision to be made:
Should BLM reroute the Paradox trail on public land.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES
Proposed Action: Montrose West Recreation proposes to reroute a portion of the Paradox Trail located south of the Tabeguache Area and north of Nucla. The location of the proposed reroute and trailhead is located on Map 1. This reroute will include construction of approximately 4 miles of new single-track trail in order to connect to existing roads and trails which have been

analyzed and approved in the BLM Uncompahgre Field Office Travel Management Plan Amendment. One trailhead with a kiosk will also be constructed on BLM public land just east of Nucla. The proposed trail will be flagged on-the-ground prior to environmental clearances and construction. Leave No Trace© principles, BLM design features and guidelines, and best management practices would be followed on all trail work.



Map 1.

Design Features:

Trailhead:

1. The trailhead would include approximately one acre of surface disturbance including a new gravel parking area for up to five vehicles and one kiosk.
2. In areas lacking natural barriers, post and pole fencing, boulders, or other site-appropriate barriers would be installed to contain use and reduce vegetation loss.
3. This trailhead would be designed and constructed by a BLM approved contractor.

Trail:

1. Principles of trail design will adhere to the following guidelines established by the International Mountain Bicycling Association (IMBA).
    a. Single-track trail tread width would be approximately 24 to 36 inches.
    b. The trail corridor will be a minimum of 5' wide by 12' high. Where the trail passes through brush and trees, vegetation would be trimmed and cleared only to the extent necessary to allow for the passage of users and to maintain the trail corridor.
    c. There will be a 3% tread out-slope.
    d. Average trail grade will be 10%. Grade reversals will be designed into the trail layout to provide natural drainage dips and prevent labor-intensive trail maintenance. Sections of trail utilizing grade reversals can exceed 10% but not more than 50% of the cross-slope for short sections of time.
    e. Trail design will avoid long straight segments. A technique called corralling will create a meandering trail that weaves around natural structures, which eliminates long sightlines and slows users down, therefore aids to prevent user conflicts.
    f. Chokes and filters will be installed using natural barriers or fencing where necessary. These are used in conjunction with signs to prevent users from accessing trails that are closed to their form of recreation (i.e. single-track trails closed to ATVs) or prevent trespassing on private land.
2. Trail construction and reroutes would connect to existing roads and trails in order to avoid private land and the Tabeguache Area.
3. Trails would be constructed using hand tools or trail building machinery to clear vegetation, define the trail tread, and construct erosion control features to promote surface water drainage.
4. Trail alignment would avoid drainage channels and associated floodplains to the maximum practical extent. If cannot avoid, drainage channel crossings would be hardened with rock or other durable material to minimize channel erosion and sediment yield.
5. Trail design would use natural vegetation patterns and terrain to blend with the surrounding landscape, and would be designed and maintained with adequate drainage features.
6. Tree trimming or pruning would avoid unnatural appearance and unnecessary impacts to trees. Any slash generated would be lopped and widely scattered. Any plant stems or tree stumps created would be cut flush with the ground wherever possible and covered with dirt and leaf litter. Where this cannot be accomplished, cut stump heights would not exceed 6 inches from the ground.

7. Surface water control would be accomplished by using natural terrain and constructed dips and water-bars. In areas where the edges of the trail need to be defined, native materials would be used.
8. Reroutes would not be constructed under the canopy of remnant large, old cottonwood trees in order to protect these trees from damage to roots or from campfires.
9. Trail developments could include cattle guards, fences, and gates where needed, as determined after implementation of the proposed action. Structural range improvements would comply with 40 CFR 1508.14.
10. Areas would be treated for noxious weeds (if present) during the appropriate season prior to construction activities (unless construction begins prior to the next opportunity to spray for weeds).
11. All construction material and equipment must be debris free and inspected before entering BLM land (including BLM machinery).
12. Educational materials would be placed at trailheads to educate users of the threats posed by noxious weeds on ecosystems. Signs would include BMPs encouraging users to reduce the spread of noxious weeds; for example, cleaning of horses hooves before leaving parking areas and having motorcycles/ATV/UTV/bicycles that are debris free before entering public lands.
13. When rerouting trails, all abandoned portions shall be rehabilitated by closing off entry, repairing and possibly recontouring eroding areas, and if needed, reseeding with a BLM approved seed mix.
14. Following construction of the reroutes, segments of user-created trails leading directly to private land would be closed and reclaimed by diverting water at critical points, stabilizing and filling the most eroded areas, breaking up compacted soils, and naturalizing the trail tread. If necessary, signs would be posted closing these trail segments and directing use to the new trail segment.
15. All seed used for rehabilitation efforts would be certified and free of noxious weeds.
16. The proposed trails would be located outside of known habitat for Federally listed or recognized plant or animal species (Threatened, Endangered, Proposed, or Candidate), with an appropriate buffer to ensure No Effect to these species. Surface disturbance associated with hand tool work would not occur within 100 feet of federally protected plants. Surface disturbance associated with mechanical or motorized means would not occur within 200 meters of federally protected plants. These protection buffers may be modified provided there are not impacts on federally protected species. Protection buffers and distances may also be extended if site characteristics and conditions warrant (i.e., trail construction upslope of a known plant population).
17. Surface disturbance associated with trail work would not occur within 50 feet of sensitive plants. Surface disturbance associated with mechanical or motorized means would not occur within 100 meters of sensitive plants. These protection buffers may be modified provided impacts on species are negligible. Protection buffers and distances may also be extended if site characteristics and conditions warrant.
18. The big game timing restriction (December 1-April 30) would apply to all motorized and mechanized construction activities, and proposed project sites within big game winter concentration and severe winter habitats.

19. Likewise, motorized and mechanized construction activities would not occur during the bald eagle wintering period in winter concentration and winter forage habitats (December 1 – April 30).
20. Motorized and mechanized construction would take place outside the bird breeding season (May 15-July 15).
21. Projects would be designed to avoid soil sedimentation problems. Additionally, adequate runoff and runoff control measures would be implemented both during construction and over the long term via routine maintenance.
22. Activities associated with the proposed action would not affect the natural and beneficial floodplain function both on site and downstream, and is in accordance with Executive Order 11988, and BLM Manual 7221.
23. Rights-of-way will be avoided to the extent possible. When they cannot be avoided, care will be given to ensure no harm or adverse impacts will be caused to the existing ROWs, and when necessary, the ROW holder will be contacted and coordinated with to ensure consideration and protection of the ROW.
24. BLM will develop and implement weather (excessively wet or droughty conditions) related trail closures.
25. BLM will route trail around soil gardens when on slick rock areas.

No Action Alternative:
Under No Action Alternative, the trail would not be re-routed and the new trail segments would not be constructed. The portion of the Paradox Trail on private land would remain closed to public access, and county roads would be used to connect portions of the existing Paradox Trail. The area would continue to be managed as "travel is limited to existing routes" in accordance with the UFO TMP Amendment.

SCOPING, PUBLIC INVOLVEMENT AND ISSUES

The Bureau of Land Management Uncompahgre Field Office began work on the Paradox Trail Reroute EA in February 2011. The public scoping process was initiated at that time, with the public notified through press releases, web site postings, and letters sent to 19 individuals and groups who had expressed an interest in the Paradox Trail Reroute project. The Uncompahgre Field Office received comments from 12 individuals and organizations in response to the request for public input. These public comments were placed into subject categories and summarized. See Appendix A for a general summary of the comments and responses.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5-3):

Name of Plan: San Juan/San Miguel Resource Management Plan

Date Approved: September 1985

Decision Number/Page and Language: Page 13. A wide range of outdoor recreation opportunities will continue to be provided for all segments of the public, commensurate with demand.

Name of Plan: Uncompahgre Basin & San Juan/San Miguel Resource Management Plan Amendments

Date Approved: June 2010

Decision Number/Page and Language: Page 10. Over time, changes to the route network may be necessary, including adding, designating, relocating, closing, maintaining, and/or changing seasonal or other use restrictions on routes, as well as adding necessary travel management support facilities. Such changes would be documented using appropriate BLM Land Use Planning regulations and NEPA procedures.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. A finding for each standard will be made in the environmental analysis (next section).

Standard	Definition/Statement
#1 Upland Soils	Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.
#2 Riparian Systems	Riparian systems associated with both running and standing water, function properly and have the ability to recover from major surface disturbances such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, and provides forage, habitat and bio-diversity. Water quality is improved or maintained. Stable soils store and release water slowly.
#3 Plant and Animal Communities	Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.
#4 Threatened and Endangered Species	Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.
#5 Water Quality	The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law as found in (5 CCR 1002-8), as required by Section 303(c) of the Clean Water Act.

AFFECTED ENVIRONMENT and ENVIRONMENTAL CONSEQUENCES/MITIGATION

This chapter provides a description of the human and environmental resources that could be affected by the Proposed Action and presents comparative analyses of the direct, indirect and cumulative effects on the affected environment stemming from the implementation of the Proposed Action.

Cumulative impacts of the proposed action are shown in the analysis of each element. Past, present and reasonably foreseeable actions known to the BLM that may occur within the affected area are shown at the end of this section

Potential effects to the resources/concerns in the table (below) were evaluated to determine if detailed analysis is necessary. Consideration of some elements is to ensure compliance with laws, statutes, regulation or Executive Orders that impose certain requirements upon all Federal actions. Other items are relevant to the management of public lands in general or to the BLM Uncompahgre Field Office (UFO) in particular. Any element not affected by the proposed action will not be analyzed.

Elements	[1]Not Present	[2]Present / No Analysis Needed	[3]Present / Requires Further Analysis	Rationale if not Analyzed
Air Quality		X		Air quality will not be impacted as a result of the Proposed Action.
ACEC	X			ACECs are not present within the project area
Wilderness		X		The Proposed Action will not impact the Tabeguache Area
Lands with Wilderness Characteristics	X			Wilderness Characteristics are not present within the project area
Wild and Scenic Rivers		X		The Proposed Action will not impact Wild and Scenic River ORVs and tentative classification for the Tabeguache Creek.
Cultural			X	
Native American Religious Concerns		X		There are no Native American religious concerns as a result of the Proposed Action.
Farmlands, Prime/Unique	X			Prime and unique farmlands are not present due to the lack of irrigation on BLM lands.

Soils			X	
Vegetation			X	
Invasive, Non-native Species			X	
Threatened and Endangered Species			X	
Migratory Birds			X	
Wildlife, Terrestrial			X	
Wildlife, Aquatic			X	
Wetlands & Riparian Zones		X		Wetlands and riparian zones will not be impacted as a result of the Proposed Action.
Floodplains	X			No permanent structures would be built in the floodplain
Water -- Surface			X	
Water -- Ground			X	
Wastes, Hazardous or Solid		X		Hazardous or solid wastes will not increase as a result of the Proposed Action.
Environmental Justice		X		Environmental justice will not be impacted as a result of the Proposed Action.
Socio-Economics			X	
Access		X		Access will not be impacted as a result of the Proposed Action.
Transportation			X	
Cadastral Survey	X			Cadastral Survey will not be impacted as a result of the Proposed Action.
Realty Authorizations		X		
Range Management		X		Range management will not be impacted as a result of the Proposed Action.
Forest Management	X			Forest management will not be impacted as a result of the Proposed Action.
Fire	X			Fire will not be impacted as a result of the Proposed Action.
Noise		X		Noise levels will not increase as a result of the Proposed Action.
Recreation			X	
Visual Resources			X	

Geology and Minerals		X		Geologic and mineral resources will not be impacted by the activities of the Proposed Action.
Paleontology	X			
Law Enforcement		X		Law Enforcement will not be impacted as a result of the Proposed Action.

[1]Not present: the element is not present in the area impacted by the proposed or alternative actions.

[2]Present but no analysis needed: the element may be present, but not affected to a degree that detailed analysis is required.

[3]Present and requires further analysis: the element is present and requires further analysis because:
1) analysis of the issue is necessary to make a reasoned choice between alternatives, or
2) analysis of the issue is necessary to determine the significance of impacts.

CULTURAL RESOURCES

Affected Environment: A Class III Cultural Resource Inventory was conducted for the proposed trails and trailhead in order to identify any cultural resources present. The Cultural Resource Inventory included field visits to the area and a file search through the BLM and online through the Colorado Historical Society, Office of Archaeology and Historic Preservation, as well as a search for relevant traditional cultural properties. This review indicated that there were no sites previously recorded in the project area. Nine prehistoric and four isolated finds were newly recorded during the inventory. Of these only 2 prehistoric sites were field evaluated as needing data or potentially eligible for listing on the National Register of Historic Places (NRHP). The remaining sites and isolated finds were field evaluated as not eligible (Grand River Institute, 2011). In 2013, BLM archaeologists re-visited the two Need Data sites and have evaluated both sites as ineligible for nomination to the National Register of Historic Places. A third site discovered during the BLM inventory is considered eligible and the proposed trail was re-routed to avoid any near approach to this site.

Environmental Consequences:

Proposed Action – There are existing trails through each of the sites and potential impacts have previously occurred. Since the sites in question have been re-evaluated as Not Eligible, there has been no adverse effect by the existing trails, nor is there a potential for additional adverse effects. Accordingly, no further work is recommended prior to construction of the proposed trails or trailhead.

No Action Alternative – There would be no impacts to cultural resources.

SOILS (includes a finding on Standard 1)

The soils on the proposed 3.81 miles of trail reroutes and the trailhead facility are primarily derived from weathered residuum, colluvium, or alluvium from interbedded sandstone and shale (Figure S1). Three soil map units (SMU) cover the proposed trail reroutes and trailhead facility but the dominant SMU is the Pinon-Bowdish-Rock outcrop Complex typically found on 3 to 30% land slopes. This SMU is comprised of 30% Pinon Soils, 25% Bowdish Soils, 25% rock

outcrop, and 20 % minor soil components. The Pinon Soil is found on escarpments, mesas and structural benches. This soil has a very high runoff potential but no hazard of flooding. It is also nonsaline with salinity concentrations of 2 mmhos/cm. The Bowdish soil is found on the same landforms as the Pinon Soil but typically on land slopes not greater that 15%. This soil has a high runoff potential but no hazard of flooding. It is very slightly saline with salinity concentrations of 4 mmhos/cm. The Rock outcrop component of this SMU occurs as exposed bedrock on 10 to 50 foot escarpments, and as scattered outcrops 1-12 inches above the ground surface. Slopes common on this component of the SMU are 3 to 30%. With exposed impervious rock and steep slopes, the Rock outcrop has a very high runoff potential.

A 0.13 mile section of the most southwest trail reroute traverses a Rock outcrop-Orthents Complex, on 40 to 90% slopes. The Rock outcrop consists of barren escarpments, ridge caps, and points of sand stone, which generally occupy positions higher on the slope. With exposed impervious rock and steep slopes, the Rock outcrop has a very high runoff potential. The Orthent soil component of this SMU is typically found on structural benches, canyons, and mesas. These soils being on slopes up to 90% can experience a high runoff potential.

The proposed trailhead facility would occur on the Mikim loam 1 to 6% slopes SMU. This SMU is 90% Mikim loam and 10% minor components. Mikim loam is typically found on the valley floor and consists of alluvium from weathered shale. The runoff potential is low and hazard of flooding is rare. The Mikim loam soils are nonsaline with salinity concentrations of 2 mmhos/cm.

The SMU descriptions in this report and additional data regarding these soils can be found in the Soil Survey of the San Miguel Area, Colorado.

Table S1. Soil Characteristics on the Proposed Rerouted Trails and Trailhead Facility

Soil Map Unit	Soil Rutting Potential[1]	Off Road and Off Trail Water Erosion Potential[2]	Water Erosion Potential from Unsurfaced Roads and Trails[3]	Wind Erosion Potential
Pinon-Bowdish-Rock outcrop Complex	Severe	Moderate	Severe	Moderate
Rock outcrop Orthents Complex	Slight	Very Severe	Severe	Low
Mikim loam	Severe	Slight	Moderate	Low

1- This rating is the hazard of soil rut formation from the operation of forestland equipment.
2- This rating is the hazard of soil loss from off road and off trail areas after disturbance activities (user created trails and play areas) that expose the soil surface.
3- The ratings in this interpretation indicate the hazard of soil loss from unsurfaced roads and trails. The ratings are based on soil erosion factor K, slope, and content of rock fragments.

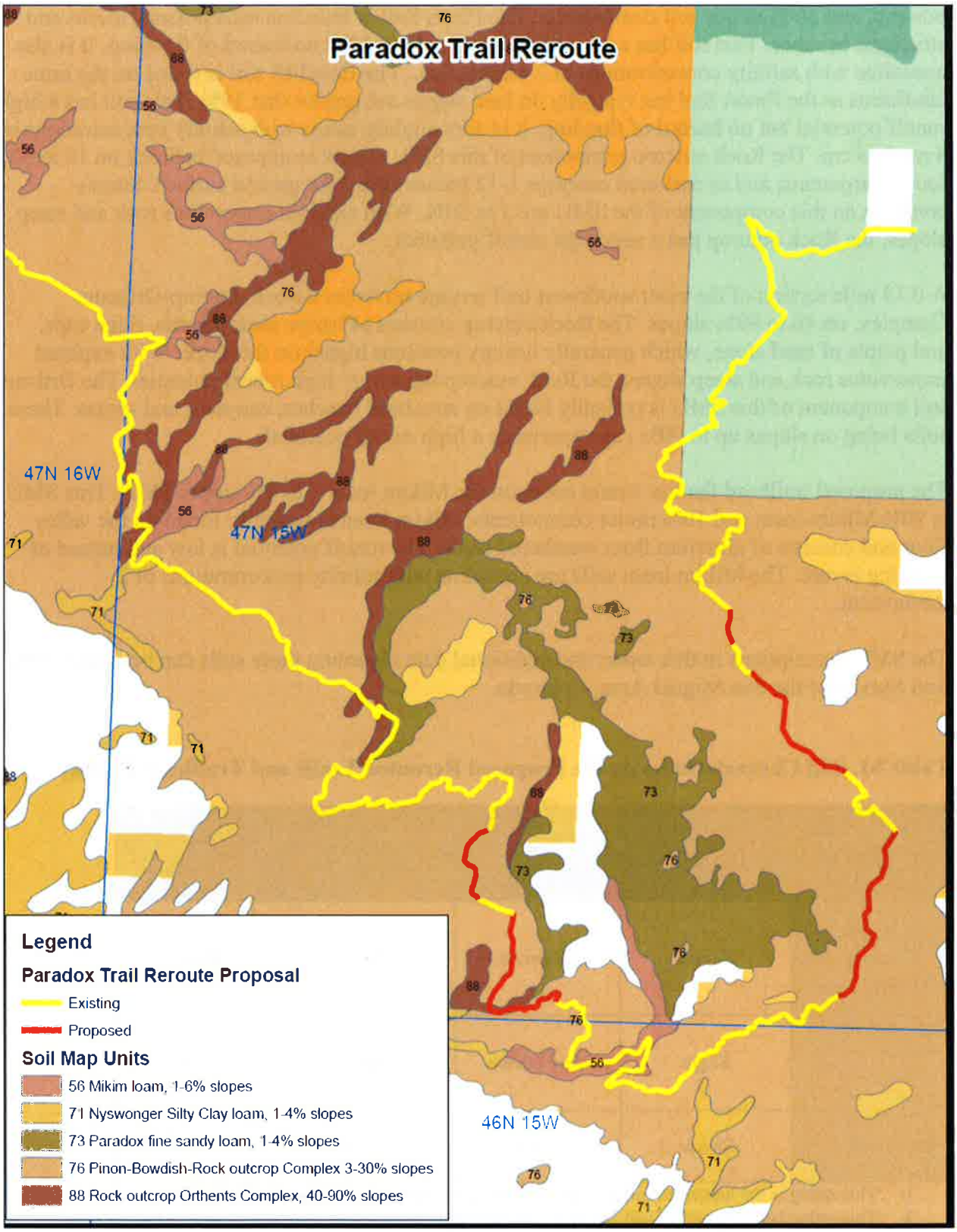


Figure S 1 Soil Map Units on the Proposed Trail Reroutes

Environmental Consequences:

Proposed Action: The area disturbed from the proposed trail reroute construction is dominated by the Pinon-Bowdish soil complex, which is commonly located on benches, mesas, and escarpments. However, some variety of landforms will be encountered, including varying land surface slopes and ephemeral and intermittent drainage crossings. The Pinon–Bowdish soils are a loamy soil that is rock free to a depth greater than 12 inches, which leaves them severely vulnerable to rutting and water erosion when disturbed. Trail crossings at drainage channels are also vulnerable to erosion from channel flow and have less distance to deliver trail erosion to the stream channel. The proposed trailhead facility would lessen soil erosion compared to the No Action or current condition. The parking surface, located at least partly on the Mikim loam soil, would be graveled and the area periphery would be barricaded to prevent soil disturbance outside of the defined area, both actions being beneficial to lessen soil erosion rates. The Mikim soil also has a severe potential to rut, which would be reduced by gravelling the vehicle parking surface. Soil erosion from wind on any of the disturbed soils would be low to moderate.

Although a small amount of accelerated soil erosion would be expected with implementing the proposed action, the Trail Design Features (#1,# 4, #5, #7, #8, #10, #15, #16, #24, #25, #26 and #27) and the Trailhead Design Features (#1 and #2) would minimize soil erosion rates and associated secondary impacts (e.g. sediment in local water ways).

Proposed Action, Standard 1 finding: Under this alternative, soil productivity and soil surface conditions would improve over time, as selected existing routes are closed and rehabilitated. The four proposed trail reroutes and trailhead facility would be designed and maintained in accordance with the Trail Design Features and Mitigation in this assessment. Collectively, these components of the proposed action would result in substantially less impact to the soil resource than the No Action Alternative and would meet the intent of Colorado's Public Land Health Standard #1.

No Action Alternative: Under the No Action Alternative, even with the area under the management of the UFO TMP Amendment, some additional user created trails would be expected, which would not receive the priority needed to locate, close, and rehabilitate, resulting in accelerated soil erosion. With the lack of current design features incorporated in to the existing trail complex and lack of mitigation, and adequate monitoring and maintenance, accelerated rates of soil erosion would increase over time. Additional support facilities such as the graveled trailhead parking area would not be implemented, and public education efforts to minimize impacts to soil resources would not occur at the intensity that would occur under the proposed action. Thus, the impacts to soil resources would progressively increase over time and result in secondary impacts to water resources, as described in the Surface and Ground Water Quality section.

No Action, Standard 1 finding: Under this alternative, soil productivity would be expected to decline over time as more user created routes and diffuse use increases.

The lack of mitigation and design features to keep travel route erosion at a minimum would also add to the decline of soil productivity. Consequently, ground surface disturbance would increase, decreasing the potential for healthy native vegetation communities and result in accelerating soil erosion. Thus, this alternative would not meet the intent of Public Land Health Standard #1.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The dominant vegetation communities in the proposed action area are intact pinyon-juniper woodland and chained pinyon-juniper woodland. The pinyon-juniper woodland is of mixed age, low in stature, and dominated by juniper. The understory is generally open, with occasional mountain mahogany *(Cercocarpus montanus)* and serviceberry *(Amelanchier utahensis)*, and a variety of forbs and grasses. Along some of the proposed trail southeast of 25 Mesa Road, a juniper-black sagebrush *(Artemisia nova)* association dominates. Two patches of chained pinyon-juniper woodland occur at and just south of the northeast terminus of the proposed reroute, in Sections 22 and 27. The chained areas support a high proportion of ruderal natives, such as copper mallow *(Sphaeralcea coccinea)*, and introduced species, including crested wheatgrass *(Agropyron cristatum)* and cheatgrass *(Bromus tectorum)* (see *Invasive, Non-native Species*). The proposed trailhead parking area and kiosk would be located in a small, heavily disturbed sagebrush meadow that has been used as a dumping area for carcasses and household trash. This area is dominated by non-native vegetation. A small meadow occurs towards the southern terminus of the proposed reroute south of 25 Mesa Road.

Environmental Consequences:

Proposed Action – Approximately 2.3 acres of vegetation would be removed by surface disturbance during construction of the parking area, trailhead, and new route. Approximately 51% of this consists of intact pinyon-juniper woodland, 4% chained pinyon-juniper woodland, 44% degraded sagebrush meadow, and 1% meadow. Vegetation overhanging the trail would be trimmed within a corridor approximately 12 feet high and 5 feet wide. Direct impacts to vegetation will be minimized by utilizing best management practices such as limiting tree removal and trimming along trails and placing developments in areas that are already disturbed. Non-use areas disturbed during construction and abandoned route segments will be revegetated with an appropriate seed mix after construction.

Limited indirect off-site impacts from the proposed action to adjacent vegetation may occur. These could include increased erosion and sedimentation, introduction of non-native weeds, production and deposition of dust, and impacts from increased human presence. These off-site impacts can extend up to many feet around a developed area.

Overall, there will be short term and minor damage to vegetation when considered across the entire project area, and long term neutral effects to vegetation if all of the Design Features are implemented. The proposed developments are expected to direct use of the area by mountain bikers to hardened locations, and would alleviate some of the vegetation disturbance that is currently occurring from dispersed user-created recreation sites and trails.

No Action Alternative – There will be no new recreational developments, and no direct impacts to vegetation from this alternative. Long term low levels of vegetation damage would occur in some areas as dispersed use recreation increases, but would probably be undetectable at the landscape level.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Invasive, Non-native Species): The vegetation within the proposed action area currently meets the criteria established in Standard 3 for plant and animal communities. Following successful implementation of the Design Features, the proposed action would not alter this status.

INVASIVE, NON-NATIVE SPECIES (includes a finding on Standard 3)

Affected Environment: The proposed action area lies within the 213,816-acre Tabeguache Weed Management Area, which is part of the Horsefly, Tabeguache and Paradox Coordinated Weed Management Area (UPP 2010). During the rare plant survey conducted in May 2011, non-native invasive plant species occurring in the proposed action area were noted, although they were not systematically surveyed. A special focus was given to the priority and early detection species listed in the *2010 Operating Plan: West Montrose County Weed Management Areas* (UPP 2010). Of the focus species, cheatgrass was detected, with highest densities found in chained pinyon-juniper woodland and the proposed trailhead parking area. Other non-native species noted include: alyssum (*Alyssum desertorum* and *A. parviflorum*), blue mustard *(Chorispora tenella)*, burr buttercup *(Ranunculus testiculatus)*, cranesbill *(Erodium cicutarium)*, crested wheatgrass, horehound *(Marrubium vulgare)*, Jim Hill mustard *(Sisymbrium altissimum)*, kochia *(Bassia sieversiana)*, Russian thistle *(Salsola australis)*, salsify *(Tragopogon dubius)*, and sweet meliot *(Melilotus officinale)*. Other invasive non-native species may occur along portions of the existing trail that will be crossed to access the new trail segments.

Environmental Consequences:

Proposed Action – Noxious weed species have the potential to invade the project area along lines of disturbance created by new trail segment and trailhead parking area construction and use. Weed propagules may enter the disturbed area by natural dispersal mechanisms, on heavy equipment used during the construction phase of the proposed action, and on bicycles. The proposed action would likely create additional use in the area, which could also increase the probability of spreading existing and introducing additional noxious weeds into the area. Invasion by exotics may displace natives, alter the visual character of the landscape, and, if the weeds are annuals, increase susceptibility of soils to erosion or increase frequency and intensity of wildfires.

Designing a sustainable planned trail system and trailhead parking area will mitigate noxious weed spread by concentrating use within approved areas that will be easier to monitor for the establishment of noxious weeds. Long term impacts will be mitigated by placing weed information for trail users at trailheads and kiosks, and by implementing trail Design Features which minimize trail erosion and seed transport. With the successful implementation of all Design Features, long term effects to the area from invasive non-native species are expected to be neutral, and possibly improve from the current condition.

Integrated Weed Management methods appropriate to the project area include the use of herbicides, manual removal, and mechanical removal where necessary. In the treatment of non-native grasses and some non-native forbs, imazapic (Plateau®) or glyphosate would be used in broadcast applications during the appropriate time of year at the lowest appropriate application rate to reduce damage to adjacent native vegetation. Type of application would be either ground or aerially applied as a pre-emergence or post-emergence depending upon species targeted. All herbicide applications would follow label directions and cautions, and BLM restrictions and guidelines.

No Action Alternative – Under this alternative, poor placement of existing user created routes, parking areas, and trailheads would not be addressed. Persistence of existing weeds within the dispersed use area and potential for invasion of the area by additional weed species would continue at existing levels, leading to long term moderate effects on soils, native vegetation, and the visual character of the landscape.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic; Wildlife, Terrestrial; and Vegetation): With the successful implementation of the Design Features, including education, monitoring, and treatment, the proposed action should be neutral or possibly beneficial in controlling adverse impacts of noxious weeds. The proposed action therefore would maintain or improve the current status of the area with respect to Standard 3.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on Standard 4)

Affected Environment: The Endangered Species Act (ESA), as amended (16 U.S.C. 1531-1534) mandates the protection of species listed as threatened or endangered of extinction and the habitats on which they depend. Section 7 of the ESA clarifies the responsibility of federal agencies to utilize their authorities to carry out programs for the conservation of listed species. In addition, federal agencies must consult with the U.S. Fish and Wildlife Service (Service) to ensure that any action authorized, funded or carried out by a federal agency is "...not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species...". The Uncompahgre Field Office (UFO) refers to the most current Colorado county list provided by the Service to analyze the effects of a proposed action on threatened, endangered and candidate species and designated critical habitat for these species. For BLM Sensitive species the goal of management, in accordance with *BLM Manual 6840*, is to prevent a trend toward federal listing or loss of viability. The following table lists all federally listed and Candidate species potentially occurring in Montrose County, and BLM Sensitive species potentially occurring in the project area. Field surveys were conducted in May 2011 for BLM Sensitive plant species within 50 feet of proposed site disturbance. Surveys were conducted in June 2011 for nesting raptors within ¼ mile of proposed site disturbance (BIO-Logic 2011). No BLM Sensitive plant species or nesting raptors were found.

Species	Status[1]	Habitat	Potential and/or Known Occurrences in Project Area
Birds			
Mexican spotted owl *(Strix occidentalis lucida)*	T, ST	Mixed-confer forest and steep-walled canyons	No habitat, no recent occurrences in Montrose County.
Southwestern willow flycatcher *(Empidonax trailii extimus)*	E, SE	Riparian tree and shrub communities, wetlands for breeding	No breeding habitat, does not occur.
Bald eagle *(Haliaeetus leucocephalus)*	BLM, ST	Major river systems, reservoirs, arid basins	No known breeding occurrences in or near project area. Wintering bald eagles are common in San Miguel River valley to the south and they forage in the project area.
Northern goshawk *(Accipiter gentilis)*	BLM	Breeds in aspen conifer mixed forests	Highly unlikely would nest in or near project area and survey found no nesting raptors. Therefore, does not occur.
American peregrine falcon *(Falco peregrines anatum)*	BLM, SC	Open country near cliff habitat	No breeding habitat is in project area. Nearest known breeding >10 miles west; not likely to occur.
Ferruginous hawk *(Buteo regalis)*	BLM, SC	Large expanses of ungrazed to lightly grazed grasslands and shrublands; not known to nest in Montrose County	No habitat, no known breeding occurrences in or near project area.
Brewer's sparrow (*Spizella breweri*)	BLM	Breeds predominantly in sagebrush shrublands; migrants seen in wooded, brushy, weedy riparian, agricultural, and urban areas.	Breeding habitat extremely limited in small and limited sagebrush patches. A few breeding pairs may occur.
Mammals			
Canada lynx *(Lynx canadensis)*	T, SE	Spruce/fir/mixed conifer/lodgepole pine forests (primary), or mixed deciduous/conifer (secondary)	No habitat, highly unlikely to occur.
Black-footed ferret *(Mustela nigripes)*	E, SE	Prairie dog colonies; sagebrush, desert shrublands, grasslands	No habitat, does not occur.

Species	Status[1]	Habitat	Potential and/or Known Occurrences in Project Area
Gunnison's prairie dog *(Cynomys gunnisoni)*	BLM	Sagebrush, desert shrublands, grasslands, from 6,000-12,000' elevation.	Project area not within mountainous area and none were observed during field survey.
Fringed myotis *(Myotis thysanodes)*	BLM	Ponderosa pine, pinyon-juniper, mountain shrub, and desert shrub	May occur.
Spotted bat *(Euderma maculatum)*	BLM	Roosting: rocky cliffs near riparian areas. Non-roosting: ponderosa pine, pinyon-juniper, semiarid shrublands	No roosting habitat, may occur.
Big free-tailed bat *(Nyctinomops macrotis)*	BLM	Rocky canyon habitats; roosts on cliff faces; day roosts in buildings and tree cavities	Rare, may occur.
Allen's big-eared bat *(Idionycteris phyllotis)*	BLM	Mountainous areas; ponderosa pine, pinyon-juniper, pine-oak woodland, and riparian habitats	Rare, may occur.
Townsend's big-eared bat *(Corynorhinus townsendii)*	BLM, SC	Roosting: caves, abandoned mines; Non-roosting: forests, woodlands, shrublands, and grasslands	No roosting habitat.
Reptiles			
Midget-faded rattlesnake *(Crotalus viridis concolor)*	BLM, SC	Riparian, salt shrub, mountain shrub, pinyon-juniper	May occur.
Milk snake (*Lampropeltis triangulum taylori*)	BLM	Shrubby hillsides, canyons, pinyon-juniper woodland, ponderosa pine stands; hibernates in rock crevices.	May occur.
Fish			
Bonytail *(Gila elegans)*	E, SE, CH	Colorado River and major tributaries	Changes to river water quality or volume could affect downstream populations or habitat.
Colorado pikeminnow *(Ptychocheilus lucius)*	E, ST, CH	Colorado River and major tributaries, including the lower Gunnison River	Changes to river water quality or volume could affect downstream populations or habitat.
Humpback chub *(Gila cypha)*	E, ST, CH	Colorado River and major tributaries	Changes to river water quality or volume could affect downstream populations or habitat.

Species	Status[1]	Habitat	Potential and/or Known Occurrences in Project Area
Razorback sucker *(Xyrauchen texanus)*	E, SE, CH	Colorado River and major tributaries, including the lower Gunnison River	Changes to river water quality or volume could affect downstream populations or habitat.
Greenback cutthroat trout *(Oncorhynchus clarki stomias)*	T, ST	Cold water streams and lakes	No habitat, does not occur.
Plants			
Clay-loving wild buckwheat *(Eriogonum pelinophilum)*	E	Mancos shale badlands, salt desert shrublands 5200-6400' elevation; adobe hills of the Uncompahgre and Gunnison river valleys	No habitat, does not occur.
Colorado hookless cactus *(Sclerocactus glaucus)*	T	Rocky hills, mesas, slopes, 4500-6000' elevation, desert shrub communities of the Gunnison and Colorado river valleys	Out of range, does not occur.
Grand Junction milkvetch *(Astragalus linifolius)*	BLM	Open pinyon-juniper woodlands and sagebrush, mostly on soils derived from the Chinle or Morrison Formations	Habitat exists, but no occurrences were found during field survey.
Naturita milkvetch *(Astragalus naturitensis)*	BLM	Pinyon-juniper woodland with fractured sandstone bedrock on or just below soil surface	Habitat exists, but no occurrences were found during field survey.
San Rafael milkvetch *(Astragalus rafaelensis)*	BLM	Banks of washes and below sandstone outcrops on seleniferous shale or sandstone-derived soils	Habitat exists, but no occurrences were found during field survey.
Paradox Valley (Payson's) lupine *(Lupinus crassus)*	BLM	Sparse juniper woodland to shrub grassland, usually on the Chinle or carboniferous shale	Habitat exists, but no occurrences were found during field survey.
Paradox breadroot *(Pediomelum aromaticum)*	BLM	Open shrublands and sparse pinyon-juniper communities, west of the Uncompahgre Plateau	Habitat exists, but no occurrences were found during field survey.

[1] Status: E = Federally Endangered; T = Federally Threatened; C = Federal Candidate; CH = Critical Habitat has been designated; SE = State Endangered; ST = State Threatened; SC = State Species of Special Concern; BLM = BLM Sensitive.

Environmental Consequences:

Proposed Action –

Threatened and Endangered Species

Because no federally listed species or designated Critical Habitat occurs in the project area, the proposed action would not directly affect any federally listed species or adversely modify Critical Habitat in the project area. The proposed action would not result in water depletions to the Colorado River Basin, or affect downstream water quality; as a consequence, the proposed action would not affect downstream populations of Colorado River endangered fish species or adversely modify their Critical Habitat.

BLM Sensitive and Federal Candidate Species

The proposed activities have the potential to temporarily disturb wildlife, plants, and/or habitats. Refer to the Vegetation Section for more discussion on this project's potential impacts on habitats. Most impacts would likely be indirect, resulting from human noise and presence disturbance. For instance, birds may abandon nests adjacent to trails. Impacts would be greatest where the proposed activities overlap in space or time with essential or crucial habitat types. Impacts will likely be greatest where new surface disturbance is anticipated. Some species and populations in the area may be habituated to recreation and human activities. Impacts would continue to occur over time as a result of trail use. However, the overall effect for all BLM Sensitive or federal Candidate species is expected to be short-term and minimal, and is not likely to result in a trend toward federal listing.

The Colorado Natural Heritage Program (CNHP) has recommended some areas near the project area as Potential Conservation Areas (PCA). The Highway 141 and 145 PCA is located three miles to the southwest and most significantly contains occurrences of three rare plant species: Payson lupine, Naturita milkvetch, and little penstemon *(Penstemon breviculus)* (Lyon and Sovell 2000). The Naturita Upland PCA, four miles south of the project area, was primarily identified to preserve a good occurrence of Payson lupine (Lyon and Sovell 2000). Because the proposed activities would not occur within any CNHP PCA, it would not affect the plant species located within these PCAs and would not preclude enhanced protection of the PCA sites in the future. Surveys were conducted on May 26 and 27, 2011for the BLM sensitive Payson lupine (*Lupinus crassus*), Naturita milkvetch (*Astragalus naturitensis*), Grand Junction milkvetch (*Astragalus linifolius*), and San Rafael milkvetch (*Astragalus rafaelensis*). The proposed trail reroute encounters ample intact suitable habitat for the Naturita milkvetch however no plants were found as a result of these surveys.

No Action Alternative: Impacts on species and habitats may continue and worsen due to cross-country hiking, extraneous social trails, and the lack of designated parking for vehicles.

Finding on the Public Land Health Standard for Threatened & Endangered species: Implementation of the proposed action is unlikely to influence the current status of these species under this standard. Therefore, the proposed action would meet the criteria for this Land Health Standard.

MIGRATORY BIRDS

Affected Environment: Plant communities within the project area provide habitat for a variety of migratory bird species. The U.S. Fish and Wildlife Service list of Birds of Conservation Concern was used to complete this analysis (USFWS 2008, Table 14, p.32, BCR 16 [Southern Rockies/Colorado Plateau]). The following are species from this list which are known or have potential to occur in the project area and which are protected under the Migratory Bird Treaty Act (MBTA):

Species	Habitat	Range and Status in the Uncompahgre Field Office
Bald eagle *(Haliaeetus leucocephalus)*	Major river systems, reservoirs, arid basins	Winter resident in project area, confirmed breeding in 2 locations along Gunnison River, Delta County
Peregrine falcon *(Falco peregrines)*	Open country near cliff habitat	Spring/summer resident, breeding in Dolores River canyons about 10 miles west.
Golden eagle *(Aquila chrysaetos)*	Open country, grasslands, woodlands, and barren areas in hilly or mountainous terrain; nests on rocky outcrops	Year-round resident, breeding
Ferruginous hawk *(Buteo regalis)*	Large expanses of ungrazed to lightly grazed grasslands and shrublands; not known to nest in Montrose County	Fall/winter resident, non-breeding
Prairie falcon *(Falco mexicanus)*	Open country in mountains, steppe, or prairie; winters in cultivated fields; nests in holes or on ledges on rocky cliffs or embankments	Year-found resident, breeding
Gray vireo *(Vireo vicinior)*	Pinyon-juniper and open juniper-grassland	Summer resident, breeding
Pinyon jay *(Gymnorhinus cyanocephalus)*	Pinyon-juniper woodland	Year-round resident, breeding
Juniper titmouse *(Baeolophus griseus)*	Pinyon-juniper woodlands, especially juniper; rests in tree cavities	Year-round resident, breeding
Brewer's sparrow (*Spizella breweri*)	Sagebrush-grass stands; less often in pinyon-juniper woodlands	Summer resident, breeding

Environmental Consequences:

Proposed Action – Refer to the Threatened, Endangered, and Sensitive Species section for a general discussion of the proposed action's potential impacts on wildlife and habitats. The overall effect for migratory birds is expected to be short-term and negligible. Therefore, the proposed action may affect individuals but is unlikely to have a measurable impact on species or populations or their viability on a landscape scale.

No Action Alternative – Impacts on vegetation, habitats, and migratory birds may continue and worsen due to cross-country hiking, extraneous social trails, and the lack of designated parking for vehicles.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The proposed action area provides habitat for a variety of terrestrial wildlife including small mammals, carnivores, reptiles, birds, and big game. Example species include cottontail rabbit, coyote, bobcat, mountain lion, mule deer, elk, and various songbirds. Federally listed or BLM Sensitive terrestrial species are addressed in the Threatened, Endangered, and Sensitive Species section. The area supports migratory herds of mule deer and elk, and is within Colorado Division of Parks and Wildlife (CPW) Big Game Management Unit 61, managed for high-quality elk hunting. Elk and mule deer are mostly at higher elevations in summer, but use the project area consistently from late fall through spring for winter range and as part of a broad movement corridor between summer and winter ranges. CPAW has mapped the project area within Winter Concentration Area and Severe Winter Range for both mule deer and elk. The project is also mapped within Winter Range for wild turkey, an important and popular game species in the region. The project area was surveyed for nesting raptors in June 2011 (BIO-Logic 2011), and no nesting raptors were found within ¼ mile of the proposed trail reroute segments or trailhead.

Environmental Consequences:

Proposed Action – Refer to the Threatened, Endangered, and Sensitive Species section for a general discussion of the proposed action's potential impacts on wildlife and habitats. Activities will have minimal impacts on habitat. Most terrestrial wildlife avoids human activities and, therefore, may be temporarily displaced from suitable habitat during project construction and by passing recreationists. Many animals may be habituated to recreation activities, which are already common in the area. Timing limitations on project construction (Design Feature 20) would avoid construction disturbance to wintering big game. Most recreational use of the trail would also occur outside of big game wintering season. The proposed action would not be likely to interfere with big game seasonal migration, or significantly shift big game distribution from public lands to private lands in any season. Based on this information and project Design Features, the overall effect for terrestrial species is expected to be short-term and negligible. No raptor nesting activity was observed during field survey which took place on June 10 and 11, 2011. The relatively xeric and low-growing pinyon juniper woodlands that characterize the area do not provide significant nesting sites for larger raptors such as Cooper's hawk, Sharp-shinned hawk, or northern goshawk, and no substantial cliff-nesting habitat occurs in the project area.

No Action Alternative – Impacts on terrestrial habitats and wildlife may continue and worsen due to cross-country recreational use, extraneous social trails, and the lack of designated parking for vehicles.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation; Invasive, Non-native Species; and Wildlife, Aquatic): Implementation of the proposed action is unlikely to influence the current status for terrestrial wildlife and habitat. Therefore, the proposed action would meet the criteria for this Land Health Standard.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: There are no permanent streams or other surface waters near or crossed by the proposed action. As a consequence, no aquatic wildlife is likely to breed or regularly occur in or near the project area. Federally listed or BLM Sensitive aquatic species are addressed in the Threatened, Endangered, and Sensitive Species section.

Environmental Consequences:

Proposed Action – Potential impacts to downstream aquatic wildlife in the San Miguel River, its tributaries, or further downstream in the Colorado River Basin could occur if the proposed action resulted in changes to water quality or volume. However, with the Design Features listed above (8 and 25), no impacts to downstream habitats are likely to occur, and the proposed action would have no impacts to aquatic wildlife.

No Action Alternative – Existing impacts if any on aquatic habitats and species may continue and worsen due to cross-country recreational use, extraneous social trails, and the lack of designated parking for vehicles.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation; Wildlife, Terrestrial; and Invasive, Non-native Species): Implementation of the proposed action is unlikely to influence the current status for aquatic wildlife and habitat. Therefore, the proposed action would meet the criteria for this Land Health Standard.

WATER – SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The area proposed for the trail reroutes is within the San Miguel Basin (Hydrologic Unit Code (HUC) 14030003). All of the proposed trail sections, except for the southernmost 1,000 feet of the 1 mile long trail section in section 35, are within the Tuttle Draw drainage. The 1,000 foot long trail section in section 35 drains to Calamity Draw. Both Tuttle and Calamity Draws drain in a westerly direction, and are directly tributary to the San Miguel River. Table W1 lists the water quality classifications for the above-described surface waters (CDPHE, Water Quality Control Commission, 5 CCR 1002-35).

Table W1 Water Quality Classifications, and Standards for Tuttle and calamity Draws.

4th Field Hydrologic Unit	*Stream Segment*	*Stream Classification* [1-5]
14030003 San Miguel Basin	Tuttle and Calamity Draws	Aquatic Life Cold 2[1] Recreation E [2] Agriculture[3] Water Supply[4]

1- Waters are designated either warm or cold based on water temperature regime. Class 1 water's are capable of sustaining a wide variety of cold or warm water biota, while class 2 waters are not.
2- Recreation Class E - Existing Primary Contact Use. These surface waters are used for primary contact recreation or have been used for such activities since November 28, 1975.
3- Waters that are suitable for irrigating crops usually grown in Colorado.
4- Waters that are suitable or intended to become suitable for potable water supplies.

In addition to the state's water quality classifications and numeric standards, all surface waters of the State are subject to the Basic Standards (Colorado Department of Public Health and Environment, Water Quality Control Commission, Regulation NO. 31), which in part reads: state surface waters shall be free from substances attributable to human-caused point or nonpoint source discharge in amounts, concentrations or combinations that:

1. Can settle to form bottom deposits detrimental to the beneficial uses. Depositions are stream bottom buildup of materials which include but are not limited to anaerobic sludges, mine slurry or tailings, silt, or mud; or
2. form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses; or
3. produce color, odor, or other conditions in such a degree as to create a nuisance or harm existing beneficial uses or impart any undesirable taste to significant edible aquatic species or to the water; or
4. are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life; or
5. produce a predominance of undesirable aquatic life; or
6. cause a film on the surface or produce a deposit on shorelines.

There are no surface waters on the proposed trail reroute area or downstream that are on Colorado's impaired waters, 303(d) list or the Colorado's Monitoring and Evaluation List (M and E List) (CDPHE, Water Quality Control Commission, 5 CCR 1002-93).

Tuttle Draw's drainage area above the proposed trail crossing is 5.5 square miles with an average land slope of 12.8% (Figure W1). The basin area is also very circular in shape which shortens the time of runoff water concentration, causing higher flood peaks. Using regionalized regression equations developed by the US Geological Survey calculates the 10 year recurrence interval flood peak for this basin to be 647 cfs with a prediction error of 67%, which produces a range in potential flows from as low as 214 to 1,082 cfs. In an attempt to narrow the wide prediction error, flow records form two nearby stream gages were reviewed: US Geological Survey Gage # 9179200 Salt Creek near gateway, Colorado, and US Geological Survey Gage # 9178400 West Creek Tributary near Gateway Colorado. The Salt Creek Gage drains 31.2 square miles and over a six year period of record (1980-1985) experienced a peak flow 2,670 cfs. Adjusting this flow to the drainage area of Tuttle produces a flow 470 cfs. The West Creek Tributary Gage drains an area of 2.27 square miles and over a 9 year period of record (1972-1980) experienced a peak

flow of 277 cfs. Adjusting this flow to the drainage area of Tuttle Draw produces a flow of 670 cfs, which is close to the flow prediction for a 10 year recurrence interval flood flow in Table W2. Thus, for channel crossing design purposes a flow in the range of 500-700 cfs should be used to provide channel protection for the 10 year recurrence interval flow event.

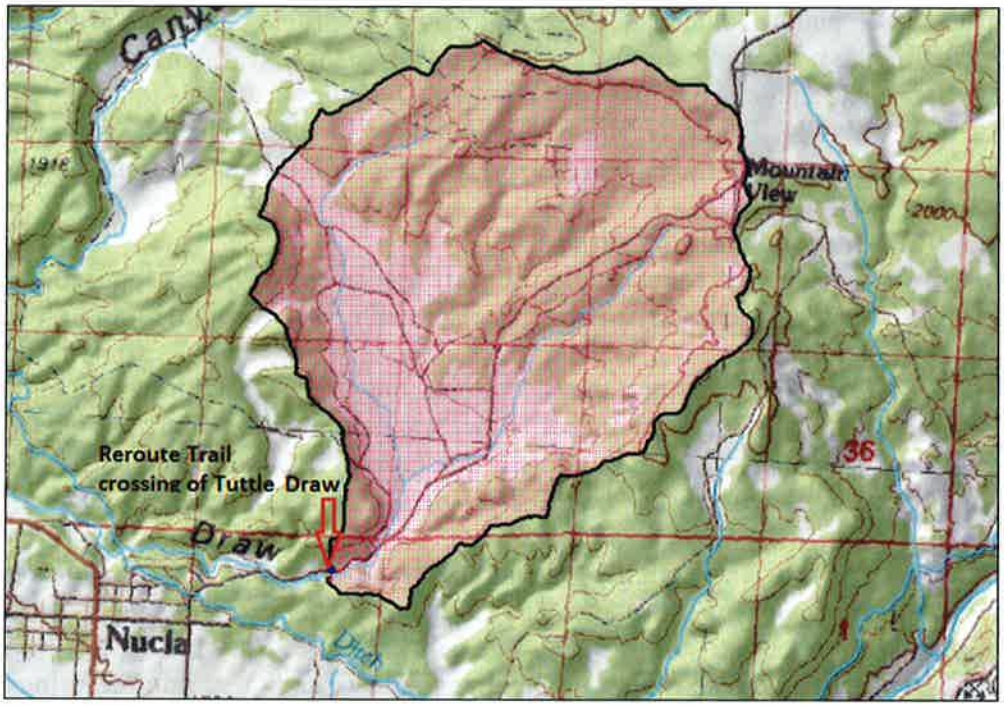


Figure W 2Tuttle Draw Drainage basin above the proposed trail crossing

Table W2 Peak-Flow Statistics for Tuttle Draw

Recurrence Interval (years)	Flow (ft^3/s)	Prediction Error (percent)	Range of Estimated Flow cfs
2	139	90	35-215
5	388	71	112-664
10	648	67	214-1,082
25	1130	66	384-1,876
50	1610	67	531-2,688
100	2220	69	688-3,752
200	2950	71	855-5,044
500	4360	75	1,090-3,700

Ground water is limited within the area. The semi-arid climate in the vicinity of the proposed action limits water availability for groundwater recharge, and the deeply incised surface topography, up gradient, on the Uncompahgre Plateau is not conducive for the occurrence of extensive, continuous, shallow groundwater aquifers. However, some geologic strata within both the Dakota and Morrison formations can contain limited amounts of groundwater within the vicinity of the proposed action. The recharge area for any groundwater in this area is the high elevations of the Uncompahgre Plateau. There are no alluvial aquifers associated with any of the drainages affected by the proposed action. There are no known ground water sources (springs or seeps) on the proposed action area but one state registered well application is located on private land in Section 27, T.47 N., R. 15 W. N.M.P.M. Well completion data is lacking for this well which implies the well may never have been developed (Colorado Decision Support System).

Environmental Consequences/Mitigation:

Proposed Action: Surface water quality impacts associated with the proposed trail reroutes and trailhead facility potentially include: accelerated levels of sediment in to local water courses, Tuttle and Calamity Draws and the San Miguel River. There are no salinity issues with the disturbed soils that would affect water quality. Commonly, unsurfaced travel routes alter natural drainage patterns, collect and concentrate runoff, and accelerate both runoff and sediment yield. However, the route location on the landscape, soil erodibility, and route design and maintenance all factor into the magnitude that hydrologic function and water quality is affected.

Under this alternative, surface water quality (accelerated levels of sediment) would decrease over time as selected; existing routes are closed and rehabilitated and the design features and mitigation are implemented on the trail reroutes. The delineating (barriers) and gravelling of the trailhead parking facility would also reduce a potential source of sediment into receiving waters. Providing public education information on the trail area and proper use, and trail signage would also help minimize user created trails and activities that result in soil resource damage. Since shallow groundwater resources do not occur on the area, there would be no impact to this resource by implementing the proposed action.

Proposed Action, Standard 5 finding: The proposed trail reroutes and trailhead facility would be designed, constructed, and maintained in accordance with the Trail Design Features and Mitigation (Soils Section) in this assessment. Collectively, these components of the proposed action would result in substantially less impact to the surface water quality than the No Action Alternative and would be in compliance with the Colorado River Basin-Salinity Control Act (Colorado River Basin Salinity Control Act of June 24), and the Colorado State Water Quality Classifications (CDPHE, Water Quality Control Commission, 5 CCR 1002-35. Thus, the proposed action would meet the intent of Colorado's Public Land Health Standard #5.

No Action Alternative: Under the No Action Alternative user created trails could continue to proliferate with little to no monitoring or maintenance, support facilities such as parking areas would not be developed, and public education efforts to minimize impacts to water resources would not occur. Thus, impacts to water quality such as higher concentrations of sediment would progressively increase over time from accelerated soil erosion on trails and undeveloped support areas.

Water Quality No Action, Standard 5 finding: Under this alternative, water quality would be expected to decline over time as more user created routes and diffuse use increases. The lack of mitigation to keep travel route erosion and the subsequent impacts to water quality (accelerated concentrations of sediment) at a minimum would also add to lower quality water. Consequently, this alternative would not meet the intent of Public Land Health Standard #5.

SOCIO ECONOMICS

Population

The Paradox Trail is located within Montrose County. The population of Montrose County has increased by 58% from 1990-2009 (Source: U.S. Census Bureau, 2009 Population Estimates, Census 2000, 1990 Census).

Table 1. Population Growth from 1990-2009			
Area	1990	2009	Percent Change
Montrose County	24423	42065	58%

Between 2005 and 2025, the population within Montrose County is projected to grow 77% (From State of Colorado Population Projections, State Demography Office). Part of this growth can be attributed to the abundance of nearby public lands managed by the BLM.

Employment and Economy

Between 1991 and 2001, the total number of employed people increased by 49% in Montrose County (See Table 2). The greatest increase in employment occurred under the Construction sector by 232%. The percentage of total employment growth for Montrose County between 1991 and 2001 was greater than total employment growth for the state. Employment in Colorado between 1990 and 2025 is expected to increase 27 %.

Table 2. Sector Employment – Number of Jobs				
Sector	**Colorado**		**Montrose County**	
	1991	2001	1991	2001
Agricultural	56,730	81,702	1584	1913
Mining	23,215	17,321	167	147
Construction	89,072	221,880	587	1949
Manufacturing	192,836	207,198	1114	1696
Transportation, Communications, and Utilities	109,129	160,336	919	945
Wholesale and Retail Trade	424,411	594,903	2641	4005
Finance, Insurance and Real Estate	144,911	207,012	604	765
Services	554,359	880,204	2720	4319
Government	338,302	391,563	2177	2870
Total Employment	1,932,965	2,762,119	12,513	18,609

Source: State of Colorado Jobs by Sector (SIC based), State Demography Office

According to a 1999 model of the distribution of tourism employment, 9% of total employment was generated by tourism in Montrose County. About 8% of total employment in Colorado was reported to tourism (Tourism Jobs Gain Ground in Colorado page 3, Center for Business and Economic Forecasting, Inc., April 27, 2001).

Income

Between 1990 and 2005, total per capita personal income for the state increased 92%. During this same period, total per capita personal income increased 91% in Montrose County (From US Department of Commerce, Bureau of Economic Analysis), probably due to increases in number of jobs related to the Services and Construction Sectors. As shown in Table 3, the per capita personal income for Montrose County in 2004 was $27,402, an increase of 91% since 1990 but $10,108 below the state average and the county was categorized into the mid-range for the 2007 cost of living index in the State of Colorado. The cost of living index measures included: housing, goods and services, transportation, health care and other expenditures.

Table 3. Per Capita Personal Income for 1990 and 2005

Area	1990	2005
Colorado	19,575	37,510
Montrose County	14,393	27,402

Source: US BEA 2007

The *Longwoods International Colorado Travel Year 2006* report stated that Colorado is ranked 9th in the country for outdoor trips and that outdoor trips now comprise the largest segment among those visiting Colorado on marketable leisure trips. The report illustrates the importance of the outdoors and public lands to the Colorado visitors who cite mountains, wilderness, and lakes/rivers as important elements of their vacation. Montrose area destinations are among the most popular for overnight pleasure trips within the locale of the area. In addition, the routes on the public lands also enhance recreation for various types of motorized and non-motorized uses. Certain locations in the planning area have become a destination site for recreational users who use motorized and mechanized vehicles. There are even some routes publicized on several websites. Off-highway vehicle (OHV) use, which includes all-terrain vehicles (ATVs), dirt or dual purpose motorcycles, snowmobiles, and 4-wheel drive vehicles, has increased 58% since 1995 (*Colorado and the Colorado Market Region, July 2007*) and the economic contribution of OHV use in Colorado is estimated to be between $204 million and $231 million, according to the Colorado Off-highway Vehicle Coalition (COHVCO). Tourism has grown in the Southwest Region fairly steadily since 2000 based on total travel impacts as measured by direct travel spending, tourism-related employment wages, and state and local taxes.

Environmental Consequences:

Proposed Action – The local economy in Montrose County is expected to benefit economically by being able to market the trails to a wider range of recreationists. The economic benefits could come from a number of reasons such as better signage of trails, better education and maps being provided, and overall an area that will appeal to a wider range of recreationists. In addition, the proposed action will continue to offer several technical motorized and mechanized trails that have become destination sites in the area.

No Action Alternative – The location of the original Paradox Trail would not change. It would no longer be one long continuous route of 100 miles or more due to the fact that a portion of the trail goes through private land. Users would be required to find their own way to connect portions of the Paradox Trail. Population increases in and around the area would result in more demand for public land access for a variety of purposes, both motorized and non-motorized. As recreation demand increases, there would be more requests for routes throughout the planning area. This would lead to widespread on-site and off-site impacts on nearby federal lands and private lands and potentially a loss of the values for which visitors come to the area to seek. Recreation behaviors, such as cross-country use, trespass, creation of new routes, and uncontrolled motorized/mechanized play would increase in intensity and scale.

TRANSPORTATION

Affected Environment: According to the UFO Travel Management Plan Amendment, travel is limited to existing routes throughout the Uncompahgre Field Office planning area. The current location of the Paradox Trail causes trespass issues and encourages encroachment of motorized and/or mechanized use in the Tabeguache Area. The new reroute and trailhead is needed to address these issues.

Environmental Consequences/Mitigation:

Proposed Action – The proposed trails and trailhead would improve connectivity between existing routes and decrease private land trespass issues. It would implement adaptive management practices stated in the UFO TMP Amendment. These projects would provide for enhanced visitor services and safety, increased resource protection, and improved recreational activities.

No Action Alternative – Visitors would continue to use existing routes for recreation and no new routes would be created. Current trails would continue to connect and lead to private land. The area will continue to have resource management and safety concerns as well as user-conflicts. These issues are also very likely to increase as more visitors come to the area.

RECREATION

Affected Environment: The Paradox Trail links the Tabeguache Trail on the Uncompahgre Plateau and Kokopelli's Trail in the La Sal Mountains of Utah. The Paradox Trail traverses over 100 miles and consists of a variety of trail, including single-track and two-track roads. The trail is popular for mountain biking, ATV riding, motorcycle riding, hiking, horseback riding, and trail running. Recreationists currently park off the side of the road to access the Paradox Trail in various locations. Other recreation activities in the area including hunting and sightseeing as the trail is located near the Unaweep/Tabeguache Scenic and Historic Byway. Currently the area is managed as dispersed recreation with limited facilities. The BLM Uncompahgre Field Office issues several Special Recreation Permits in this area for big game and lion hunting, as well as mountain bike and motorcycle tours.

Environmental Consequences:

Proposed Action – The proposed reroute will create a sustainable shared-use trail

which will decrease private land trespass issues and the encroachment of motorized and mechanized use into the Tabeguache Area. It will increase recreational opportunities for the local communities, as well as tourism for small towns in western Colorado. The proposed trailhead will decrease user-conflicts, create a safe parking area, and protect natural and cultural resources.

No Action Alternative – Recreationists will continue to use existing routes for dispersed recreation use and will continue to park along roadsides to access recreational opportunities. The current route will continue to encourage travel through private land.

VISUAL RESOURCES

Affected Environment: The public lands administered by BLM contain many outstanding scenic landscapes. While these lands provide a place to escape and enjoy the beauty of nature, they are also used for a multitude of other activities. Any activities that occur on these lands, such as recreation or transportation development, have the potential to disturb the surface of the landscape and impact scenic values. Approximately 70% of important landscapes within the Uncompahgre Field Office planning area would be protected, including areas in the San Miguel and Dolores River corridor and along Carpenter Ridge. The Visual Resource Inventory for this area is Class IV with the objective to provide for management activities that require modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.

Environmental Consequences:

Proposed Action – One small trailhead would be constructed east of Nucla on BLM land. This trailhead would serve as a hardened parking area (graveled with a mix of gravel and native soil to blend with the natural color of the ground), and would be contained from casual expansion by barriers. Barriers would consist of existing natural landscape features or boulders, fencing or a combination. Boulders would be brown granite, and would blend into the existing color and form of the surrounding environment. Fencing would be post and pole construction, either natural color or painted to blend with the environment. These would be small developments designed to blend with the larger landscape.

New single track trails would be constructed. Trail design features would have it contour throughout the landscape using sustainable trail design. The tread would be all native material. Because it would follow the contours of the land, there would be no "out of place" straight lines to catch the eye.

No Action Alternative – The visual character of the existing landscape would remain unchanged in the short term. Over the long term, continued impacts from dispersed parking and user-created trails would degrade the scenic quality of that area.

CUMULATIVE IMPACTS SUMMARY

Cumulative impacts are the environmental impacts that could result from the implementation of the Proposed Action, when added to the impacts from all other past, present, and reasonably

foreseeable activities, regardless of who is conducting such activities. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time. The cumulative effects analysis considers the geographic scope of the cumulative effects and past, present, and reasonably foreseeable actions.

Cumulative impacts could result from the proposed project when added to the impacts from all other past, present and reasonably foreseeable future activity, regardless of who is conducting such activity. Within the west end of Montrose County, approximately 80% of the lands are federal surface and federal minerals; the remainder is private and state lands.

Historically the western portion of Montrose County was agricultural and ranch lands. In the late 1800's, uranium was discovered in the area. The area experienced four boom and bust mining cycles for radium, vanadium and uranium. As a result of the mining in the past, there are numerous mine sites, many of which have been reclaimed. Colorado Geological Survey Bulletin 40 shows 659 radioactive mineral occurrences in Montrose County. In 2004, there were large increases in the market prices for uranium and vanadium which resulted in renewed interest in staking of mining claims, as well as drilling and exploration activity on public lands. This activity resulted in the submission of two 3809 Plans of Operation and several 3809 Notices in the UFO. There could be a continued increase in mine and exploration proposals in the greater area.

Oil and gas exploration wells could increase by a small amount. Currently in the west-end area of Montrose County, four exploratory oil and gas wells have been drilled in the past 5 years; one being capable of production and three were dry holes that have been abandoned.

Other actions contributing to impacts, cumulatively, include livestock grazing, vegetation treatments, wildfire, wildlife use, rights-of-ways, recreational use, and travel infrastructure. Private land activities are similar, but also include residential and agricultural activities, and energy developments.

Impacts to air quality would generally add incrementally for short periods of time (<5 hours) with no measurable cumulative impacts beyond the localized area. Degradation associated with construction activities would terminate upon completion of the trail.

The watershed for the analysis of biological resources is the Coal/Cottonwood Creek Watershed, and is 179,632 acres. Other activities causing, or that could cause, impacts to biological resources on BLM and USFS lands in the watershed are listed with approximate acreage in the table below:

Activities	**Acreage**
DOE Uranium Leasing Program (Lease Tracts)	4532 acres
Rights of Way	(111 miles*10'road bed) = 135 acres
Roads and Trails (BLM and USFS)	(992 miles*10'road bed) = 1202 acres
Vegetation Treatments (BLM)	11,633 acres
Transmission Lines	(51 miles*10'road bed) = 62 acres
County Roads	(263 miles*10'road bed) = 319 acres

The total public acreage impacted by human actions in the 179,632 acre watershed is 17,883 acres. The vegetation treatment areas (780 acres) see the majority of the use. The majority of the disturbed road acres in the watershed are due to exploration roads bulldozed prior to the 1970's. While these roads are visible on aerial photos, it can be very difficult to locate these same roads on the ground.

The proposed action, when combined with the past, present and reasonably foreseeable actions, could add to impacts from other activities on private and federal lands in the area, and could contribute to decreased soil health and degraded vegetation by a small degree, as well as an minor long term cumulative impacts for noxious weed introduction and spread.

The construction of new trails would not have direct impacts on T&E species however could result in a reduction in quantity and/or quality of habitat. When added to other existing and foreseeable activities, the proposed action is not expected to risk placing a species in jeopardy.

Although relatively few miles, construction of new trails would cumulatively increase surface disturbance, and could contribute to a reduction in quantity and/or quality of migratory bird habitat and of terrestrial wildlife habitat. The types of impacts expected from all of the cumulative actions in the watershed would be similar to those described for the Proposed Action.

Cumulative impacts to recreation would not be noticeable. Cumulative impacts to visual resources, due to the small size of the project, would not be noticeable.

INTERDISCIPLINARY REVIEW: The following BLM personnel have contributed to and have reviewed this environmental assessment.

Name	Title	Area of Responsibility
Julie Jackson	Outdoor Recreation Planner	Transportation, Recreation, VRM
Jedd Sondergard	Hydrologist and Environmental Coordinator	Water and Soils
Glade Hadden	Archeologist	Cultural and Native American Religious Concerns
Melissa Siders	Wildlife Biologist	Wildlife; Threatened, Endangered, and Sensitive Species; Migratory Birds
Lynae Rogers	Range Management Specialist	Invasive, Non-Native Species
Angie LoSasso	Range Management Specialist	Range Management and Vegetation

References

1986, BLM Visual Resource Contrast Rating Handbook. BLM/H/8410/1. Washington, D.C.: U.S. Department of the Interior, BLM.

1992, BLM Manual 8351, Wild and Scenic Rivers-Policy and Program Direction for Identification, Evaluation, and Management. Rel.8-61. Washington D.C.

2010, Final Wild and Scenic River Eligibility Report, Bureau of Land Management, Uncompahgre Field Office, Colorado.

BIO-Logic, Inc. 2011. Montrose West Recreation Paradox Trail Reroute: Rare Plant and Raptor Survey Report, unpublished report provided to Bureau of Land Management, Uncompahgre Field Office. Montrose, CO. June 2011.

CDPHE, Water Quality Control Commission, 5 CCR 1002-93, Regulation #93, Colorado's Section 303(D) List of Impaired Waters and Monitoring and Evaluation List, Adopted March 9, 2010, Effective April 30, 2010.
Colorado River Basin Salinity Control Act of June 24, 1974 (Public Law 93-320), as amended in 1984.

CDPHE, Water Quality Control Commission, 5 CCR 1002-35, Regulation NO. 35, Classifications and Numeric Standards for Gunnison and Lower Dolores River Basins, Amended February 8, 2010, Effective June 30, 2010.

Class III Cultural Resources Inventory Report for the Paradox Trail Reroute Project in Montrose, County, Colorado. Grand River Institute. July 6, 2011.

Colorado Department of Public Health and Environment, Water Quality Control Commission, Regulation NO. 31, the Basic Standards and Methodologies for Surface Water (5 CCR 1002-31), Adopted: August 9, 2010, Effective: January 1, 2011.

Lyon, P. and J. Sovell. 2000. A Natural Heritage Assessment: San Miguel and Western Montrose Counties, CO. Colorado Natural Heritage Program, Ft. Collins, CO.

Soil Survey of the San Miguel Area, Colorado. Parts of Dolores, Montrose, and San Miguel Counties. US Department of Agriculture, Natural Resources Conservation Service, US Department of the Interior, Bureau of Land Management. In cooperation with the Colorado Agricultural Experiment Station.

Uncompahgre Plateau Project (UPP). 2010. 2010 Annual Operating Plan: West Montrose County Weed Management Areas. Unpublished report prepared by UPP in coordination with Montrose County; U.S. Forest Service Grand Mesa, Uncompahgre and Gunnison National Forests; Bureau of Land Management Uncompahgre Field Office; Colorado State University Extension; and Natural Resource Conservation Service.

U.S. Fish and Wildlife Service (USFWS). 2008. Western BLM Bird Species of Conservation Concern. USDI Bureau of land Management, Uncompahgre Field Office, Montrose, Colorado

Internet Resources

Colorado Decision Support System, HydroBase and Map Viewer.
http://cdss.state.co.us/DNN/Home/tabid/36/Default.aspx

US Geological Survey Stream Stats, http://water.usgs.gov/osw/streamstats/index.html

APPENDIX A:

Summary of Public Scoping Comments and Responses

The Bureau of Land Management Uncompahgre Field Office began work on the Paradox Trail Reroute EA in February 2011. The public scoping comment period was initiated at that time, with the public notified through press releases, web site postings, and letters sent to 19 individuals and groups who had expressed an interest in the Paradox Trail Reroute project. The Uncompahgre Field Office received comments from 12 individuals and organizations in response to the request for public input. These public comments were placed into subject categories and summarized with responses.

Discipline	Affiliation	Comment	Response
Access and Transportation	Nucla-Naturita Chamber of Commerce	Supports the proposal as it provides access from Nucla and expanded loop rides near town.	Thank you for the comment.
	Nucla-Naturita Chamber of Commerce, COPMOBA, Town of Nucla, Private	Addresses a long-standing trespass issue which will relocate the current trail off private property and keep motorized and mechanized users out of the Tabeguache Area.	Thank you for the comment.
	Private	The location of the trail goes through rough terrain, ledges, canyons, and rock formations which make it difficult to navigate through, control, and monitor use.	See Proposed Action - Trail Design Features, #1.
	Private	Why not use existing roads and trails and no new routes?	This proposal used existing routes to the maximum extent possible. Less than 4 miles of new routes will be constructed in order to connect existing roads and trails on BLM lands.
	Private	Why not use the county roads in order to avoid new trails being constructed near private property?	The Paradox Trail is a remote, backcountry trail system on BLM and USFS lands. This proposal kept the nature of the trail the same.
	Private	Numerous trails recently were closed to ATVs, no new trails	See Purpose and Need for the Action.

		should be allowed.	
Access and Transportation	Private	Concerns that route proliferation will occur due to proximity to Nucla.	See Proposed Action - Trail Design Features, #1. Constructing new trail segments between existing routes will encourage users to stay on the trail rather than travel cross country in order to connect routes.
	Private	Supports proposed reroute because it keeps users off the county road and provides a better experience.	Thank you for the comment.
	Private	You have not given the residents in T46N, R15W a fair notice that they will be impacted. This township and range was not included in the public scoping.	This proposal offered the opportunity to comment on the new proposed routes, not existing routes which are already authorized and open to the public. The new routes are located entirely in T46N, R15W.
Land Health and Threats	Private	Rerouting the trail close to Nucla will create more litter from recreationists and more social trails due to hunting. Leave the trail where it is currently located.	The trailhead will include a kiosk with information regarding Leave No Trace Ethics. Cross country on BLM lands is allowed for hiking and horseback riding. A well-planned trail system will encourage users to stay the trail.
Law Enforcement and Safety	Private	Concerns regarding trails being located too close to private property which could lead to trespassing – lack of enforcement to keep people off private land.	The trails are located entirely on BLM public land. See Proposed Action – Trail Design Features, #16.
Noise	Private	Concerns use will create too much noise close to private land, especially from motorcycles.	There are already existing roads and trails in the area with less than 4 miles of new routes to connect existing routes, all on BLM public land, outside of wilderness

			areas.
Recreation	Nucla-Naturita Chamber of Commerce, Town of Nucla	New trail location will provide additional opportunities for locals and tourists, offsetting use in other high impact areas	Thank you for the comment.
	Private	Recreationists do not mix well with cattle. Gates are left open and some new ones would need to be put in place with this proposal.	BLM lands are multiple-use. See Proposed Action - Trail Design Features, #11.
	Private	Why the need for such a long trail stretching from the Tabeguache Trail to Utah?	The Paradox Trail has existed for many years. It offers numerous recreational benefits to multiple user groups. This EA addresses the need to reroute a portion of the trail due to a trespass issue.
	Private	Why not reroute the Paradox Trail through the Tabeguache Area?	The Paradox Trail is for multiple user groups, motorized and non-motorized. The Tabeguache Area is a congressionally designated area which is managed as wilderness, closed to motorized and mechanized travel.
	Private	Please postpone this decision until the trail is flagged on the ground so we know exactly where it is located.	The map provided in the public scoping comment period provided adequate information regarding location of the trail. It was also flagged and GPSed prior to on-the-ground surveys (May 2011) and will be pin flagged prior to construction. The trail is located entirely on BLM public lands.
	Private	Supports the trail system due to more opportunities, a clear trail system and needed	Thank you for the comment.

		trailhead.	
Recreation	COPMOBA	Supports the Paradox Trail overall which provides a valuable asset to Montrose and surrounding towns. We need to retain the use of this trail and institute needed reroutes.	Thank you for the comment.
Socio-Economics	Nucla-Naturita Chamber of Commerce, Town of Nucla	Support the reroute because it provides a diverse tourist base for the local economy; does not interfere with other community economic development plans; and increases tourism.	Thank you for the comment.
	Private	Concerns with spending money during hard economic times.	The project is funded by a grant from the Telluride Foundation.
	Private	Does not believe new trails near town will increase tourism or bring in more revenue.	See "Socio-Economics" section.
	Nucla-Naturita Chamber of Commerce	This project will increase environmental education and stewardship in the area.	Thank you for the comment.
Vegetation	Center for Native Ecosystems, San Juan Citizen's Alliance, Sheep Mountain Alliance	Consider potential impacts and conduct surveys of the reroute on the following rare and imperiled species and natural communities and sensitive areas: naturita milkvetch, little penstemon, Payson lupine, Western slope grasslands natural community, Highway 141 and 145 Colorado Natural Heritage Program Potential Conservation Area, and Naturita Upland Colorado Natural Heritage Program Potential Conservation Area	All proposed reroute sections and trailhead were surveyed for biological resources. See Proposed Action – Design Features, #18 and 19. Also see "Vegetation" and "Threatened and Endangered Species" sections in EA.
	Colorado Division of Wildlife	Weed control needed along trail and trailhead	See Proposed Action – Trail Design Features, #12-14. Also refer to "Invasive, Non-Native Species" section in EA

			analysis.
Wildlife, Fish, and Aquatic Habitat	Center for Native Ecosystems, San Juan Citizen's Alliance, Sheep Mountain Alliance	Consider the potential impacts of the proposed reroute on bald eagle and Gunnison prairie dog	All proposed reroute sections and trailhead were surveyed for biological resources. See Proposed Action – Trail Design Features, #18, 21, 22, and 23. Also see "Threatened and Endangered Species", "Migratory Bird", and "Wildlife, Terrestrial" sections in EA.
	Private	More people on the trails will impact wildlife, forcing them on private land and creating a hardship on private land owners.	Existing roads and trails already exist in the area. The amount of new trails proposed in this plan will not have a significant impact on wildlife. See "Wildlife Terrestrial" section in EA.
	Colorado Division of Wildlife	Reroute lies within Severe Winter Range and Winter Concentration Areas for deer and elk as well as winter range for turkey; however, use would be minimal during the critical winter months and therefore impacts should be minimal.	Thank you for the comment.

U.S. Department of the Interior
Bureau of Land Management
Uncompahgre Field Office
2465 S. Townsend Ave.
Montrose, CO 81401

Finding of No Significant Impact (FONSI)

DOI-BLM-CO-S050-2015-006 EA

Project Name: Paradox Trail Reroute

Location: T 47N, R 15W, Sec. 22, 23, 26, 27, 30, 32-35

Applicant: Montrose West Recreation

Background

The BLM Uncompahgre Field Office has completed Environment Assessment (EA) DOI-BLM-CO-S050-2015-006 which analyses the effects of a reroute of the Paradox Trail to address trespass issues, encroachment of motorized and mechanized trails into the Tabeguache Area, and proliferation of user-created routes.

The Bureau of Land Management Uncompahgre Field Office began work on the Paradox Trail Reroute EA in February 2011. The public scoping process was initiated at that time, with the public notified through press releases, web site postings, and letters sent to 19 individuals and groups who had expressed an interest in the Paradox Trail Reroute project. The Uncompahgre Field Office received comments from 12 individuals and organizations in response to the request for public input. These public comments were placed into subject categories and summarized.

Finding of No Significant Impact

Based on the analysis of potential environmental impacts contained in DOI-BLM-CO-S050-2015-006 EA, I have determined that the Proposed Action will not have a significant effect on the human environment. The proposed action includes design features to reduce impacts.

Rationale

This FONSI is based on my consideration of the Council on Environmental Quality's (CEQ) criteria for significance (40 CFR 1508.27), with regard to the context and the intensity of impacts described in the EA.

Context
The Paradox Trail links the Tabeguache Trail on the Uncompahgre Plateau and Kokopelli's Trail in the La Sal Mountains of Utah. The Paradox Trail traverses over 100 miles through a wide variety of terrain, elevation and ecological zones. Most of its length follows existing jeep and county roads, as well as some single-track trail. It travels near or through numerous towns including Nucla, Uravan, and Paradox.

The reroute portion of the Paradox Trail is located south of the Tabeguache Area and north of Nucla. This reroute will include construction of approximately 4 miles of new single-track trail in order to connect to existing roads and trails which have been analyzed and approved in the BLM Uncompahgre Field Office Travel Management Plan Amendment. One trailhead with a kiosk will also be constructed on BLM public land just east of Nucla.

Intensity

1) Impacts that may be both beneficial and adverse.
Originally the Paradox Trail was mapped along the Tabeguache Area boundary. A portion of that boundary is private land without a BLM easement through it. The reroute of the Paradox Trail allows users legal public access for the entire length. The reroute also deters mountain bikers from riding in the Tabeguache Area which is managed as a non-motorized/non-mechanized area. The reroute also brings users closer to the town of Nucla providing more amenities and an opportunity for the Town of Nucla to increase tourism to their area.

2) The degree to which the proposed action affects public health and safety.
The project will benefit public health and safety by locating the trail closer to the Town of Nucla. The project will also allow non-motorized users to utilize routes other than County roads.

3) Unique Characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
The area is known for its historic and cultural resources however the project will not interfere or impact those resources.

4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.
The BLM did provide a public comment period. The effects on the quality of the human environment are controversial for some people but not for others. The main issues identified were the proximity to private lands and the fear of increased trespass. BLM will provide adequate signing to direct users and provide maps to the local visitor center.

5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
The effects of trail construction and use are well understood, and risks to the human environment

are low.

6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
Trail construction projects are routine. This project is highly unlikely to lead to future actions with significant effects. The proposed action in itself would not trigger any future actions.

7) Consideration of the action in relation to other actions with individually insignificant but cumulatively significant impacts.
The proposed action was analyzed in relation to other actions in the "cumulative effects" section of the EA. The cumulative effects were found to be insignificant.

8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historic resources.
Internal scoping and analysis and external scoping indicate that the action would have no effect on any of the concerns listed above.

9) The degree to which the action may adversely affect an endangered or threatened species or its critical habitat.
The project will not adversely affect an endangered or threatened species or its critical habitat.

10) Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.
The proposed action is consistent with federal, state and local law. It would violate no requirements imposed for the protection of the environment.

Determination

This Finding of No Significant Impact is based on the information contained in the EA and my consideration of criteria for significance (40 CFR 1508.27). It is my determination that: 1) the implementation of the proposed action will not have significant environmental impacts; 2) the Proposed Action is in conformance with the San Juan/San Miguel Resource Management Plan; and 3) the Proposed Action does not constitute a major federal action having significant effect on the human environment. Therefore, an Environmental Impact Statement is not necessary.

Authorized Official:

Barbara Sharrow

7-17-15

Barbara Sharrow
Field Manager
Uncompahgre Field Office

Date

U.S. Department of the Interior
Bureau of Land Management
Uncompahgre Field Office
2465 South Townsend Avenue
Montrose, CO 81401

Decision Record

(DOI-BLM-CO-S050-2015-006 EA)

DECISION: It is my decision to implement the proposed action, as described in EA # DOI-BLM-CO-S050-2015-06. The proposed action entails rerouting a portion of the Paradox Trail located south of the Tabeguache Area and north of Nucla. The location of the proposed reroute and trailhead is located on Map 1. This reroute will include construction of approximately 4 miles of new single-track trail in order to connect to existing roads and trails which have been analyzed and approved in the BLM Uncompahgre Field Office Travel Management Plan Amendment. One trailhead with a kiosk will also be constructed on BLM public land just east of Nucla. The proposed trail will be flagged on-the-ground prior to environmental clearances and construction. Leave No Trace© principles, BLM design features and guidelines, and best management practices would be followed on all trail work.

Design Features

Trailhead:

1. The trailhead would include approximately one acre of surface disturbance including a new gravel parking area for up to five vehicles and one kiosk.
2. In areas lacking natural barriers, post and pole fencing, boulders, or other site-appropriate barriers would be installed to contain use and reduce vegetation loss.
3. This trailhead would be designed and constructed by a BLM approved contractor.

Trail:

1. Principles of trail design will adhere to the following guidelines established by the International Mountain Bicycling Association (IMBA).
    a. Single-track trail tread width would be approximately 24 to 36 inches.
    b. The trail corridor will be a minimum of 5' wide by 12' high. Where the trail passes through brush and trees, vegetation would be trimmed and cleared only to the extent necessary to allow for the passage of users and to maintain the trail corridor.
    c. There will be a 3% tread out-slope.
    d. Average trail grade will be 10%. Grade reversals will be designed into the trail layout to provide natural drainage dips and prevent labor-intensive trail maintenance. Sections of trail utilizing grade reversals can exceed 10% but not more than 50% of the cross-slope for short sections of time.
    e. Trail design will avoid long straight segments. A technique called corralling will create a meandering trail that weaves around natural structures, which eliminates

long sightlines and slows users down, therefore aids to prevent user conflicts.

f. Chokes and filters will be installed using natural barriers or fencing where necessary. These are used in conjunction with signs to prevent users from accessing trails that are closed to their form of recreation (i.e. single-track trails closed to ATVs) or prevent trespassing on private land.

2. Trail construction and reroutes would connect to existing roads and trails in order to avoid private land and the Tabeguache Area.
3. Trails would be constructed using hand tools or trail building machinery to clear vegetation, define the trail tread, and construct erosion control features to promote surface water drainage.
4. Trail alignment would avoid drainage channels and associated floodplains to the maximum practical extent. If cannot avoid, drainage channel crossings would be hardened with rock or other durable material to minimize channel erosion and sediment yield.
5. Trail design would use natural vegetation patterns and terrain to blend with the surrounding landscape, and would be designed and maintained with adequate drainage features.
6. Tree trimming or pruning would avoid unnatural appearance and unnecessary impacts to trees. Any slash generated would be lopped and widely scattered. Any plant stems or tree stumps created would be cut flush with the ground wherever possible and covered with dirt and leaf litter. Where this cannot be accomplished, cut stump heights would not exceed 6 inches from the ground.
7. Surface water control would be accomplished by using natural terrain and constructed dips and water-bars. In areas where the edges of the trail need to be defined, native materials would be used.
8. Reroutes would not be constructed under the canopy of remnant large, old cottonwood trees in order to protect these trees from damage to roots or from campfires.
9. Trail developments could include cattle guards, fences, and gates where needed, as determined after implementation of the proposed action. Structural range improvements would comply with 40 CFR 1508.14.
10. Areas would be treated for noxious weeds (if present) during the appropriate season prior to construction activities (unless construction begins prior to the next opportunity to spray for weeds).
11. All construction material and equipment must be debris free and inspected before entering BLM land (including BLM machinery).
12. Educational materials would be placed at trailheads to educate users of the threats posed by noxious weeds on ecosystems. Signs would include BMPs encouraging users to reduce the spread of noxious weeds; for example, cleaning of horses hooves before leaving parking areas and having motorcycles/ATV/UTV/bicycles that are debris free before entering public lands.
13. When rerouting trails, all abandoned portions shall be rehabilitated by closing off entry, repairing and possibly recontouring eroding areas, and if needed, reseeding with a BLM approved seed mix.
14. Following construction of the reroutes, segments of user-created trails leading directly to private land would be closed and reclaimed by diverting water at critical points, stabilizing and filling the most eroded areas, breaking up compacted soils, and

naturalizing the trail tread. If necessary, signs would be posted closing these trail segments and directing use to the new trail segment.

15. All seed used for rehabilitation efforts would be certified and free of noxious weeds.
16. The proposed trails would be located outside of known habitat for Federally listed or recognized plant or animal species (Threatened, Endangered, Proposed, or Candidate), with an appropriate buffer to ensure No Effect to these species. Surface disturbance associated with hand tool work would not occur within 100 feet of federally protected plants. Surface disturbance associated with mechanical or motorized means would not occur within 200 meters of federally protected plants. These protection buffers may be modified provided there are not impacts on federally protected species. Protection buffers and distances may also be extended if site characteristics and conditions warrant (i.e., trail construction upslope of a known plant population).
17. Surface disturbance associated with trail work would not occur within 50 feet of sensitive plants. Surface disturbance associated with mechanical or motorized means would not occur within 100 meters of sensitive plants. These protection buffers may be modified provided impacts on species are negligible. Protection buffers and distances may also be extended if site characteristics and conditions warrant.
18. The big game timing restriction (December 1-April 30) would apply to all motorized and mechanized construction activities, and proposed project sites within big game winter concentration and severe winter habitats.
19. Likewise, motorized and mechanized construction activities would not occur during the bald eagle wintering period in winter concentration and winter forage habitats (December 1 – April 30).
20. Motorized and mechanized construction would take place outside the bird breeding season (May 15-July 15).
21. Projects would be designed to avoid soil sedimentation problems. Additionally, adequate runoff and runoff control measures would be implemented both during construction and over the long term via routine maintenance.
22. Activities associated with the proposed action would not affect the natural and beneficial floodplain function both on site and downstream, and is in accordance with Executive Order 11988, and BLM Manual 7221.
23. Rights-of-way will be avoided to the extent possible. When they cannot be avoided, care will be given to ensure no harm or adverse impacts will be caused to the existing ROWs, and when necessary, the ROW holder will be contacted and coordinated with to ensure consideration and protection of the ROW.
24. BLM will develop and implement weather (excessively wet or droughty conditions) related trail closures.
25. BLM will route trail around soil gardens when on slick rock areas.

RATIONALE: The analysis of the proposed action did not identify any impacts that would be significant in nature either in context or intensity. The project will greatly reduce dispersed parking and user-created trails. The Proposed Action is in conformance with the San Juan/San Miguel Resource Management Plan. The Proposed Action does not constitute a major federal action having significant effect on the human environment.

COMPLIANCE WITH MAJOR LAWS:

This decision is in compliance with the San Juan/San Miguel Resource Management Plan (1985), as amended in 2009, and applicable laws, regulations and policy, including the Endangered Species Act of 1973 (P.L. 94-325); Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703-712); Federal Water Pollution Control Act of 1948 (Clean Water Act), as amended (33 U.S.C. Chap. 26); The Wild and Scenic Act (WSRA) of 1968 (P.L. 90-542; 16 U.S.C. 1271 *et seq*); Clean Air Act of 1963, as amended (P.L. 88-206); Federal Noxious Weed Act of 1974, as amended (P.L. 93-629, 7 U.S.C. 2801 *et seq*); National Historic Preservation Act of 1966, as amended (P.L. 89-665); Archaeological and Historic Preservation Act of 1974 (P.L. 86-253); Archaeological Resources Protection Act of 1979, as amended (P.L. 96-95); and Native American Graves Protection and Repatriation Act of 1990 (P.L. 101-601).

FINDING OF NO SIGNIFICAN IMPACT:

A Finding of No Significant Impact (FONSI) was prepared, based on the information contained in the EA and my consideration of criteria for significance (40 CFR 1508.27). It is my determination that: 1) the implementation of the proposed action will not have significant environmental impacts; 2) the Proposed Action is in conformance with the (*Insert name of plan*) Resource Management Plan; and 3) the Proposed Action does not constitute a major federal action having significant effect on the human environment. Therefore, an Environmental Impact Statement is not necessary.

PUBLIC COMMENT:

The Bureau of Land Management Uncompahgre Field Office began work on the Paradox Trail Reroute EA in February 2011. The public scoping process was initiated at that time, with the public notified through press releases, web site postings, and letters sent to 19 individuals and groups who had expressed an interest in the Paradox Trail Reroute project. The Uncompahgre Field Office received comments from 12 individuals and organizations in response to the request for public input. These public comments were placed into subject categories and summarized. See Appendix A for a general summary of the comments and responses.

APPEALS:

Within 30 days of receipt of this decision, you have the right of appeal to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR 4.400. Appeal and stay procedures are outlined in Form CO-050-1842-1.

NAME OF PREPARER: Julie Jackson

NAME OF ENVIRONMENTAL COORDINATOR: Jedd Sondergard

DATE 7/2/15

SIGNATURE OF AUTHORIZED OFFICIAL

Barbara Sharrow
Field Manager
Uncompahgre Field Office

DATE SIGNED 8-10-15

APPENDICES: Appendix A. Summary of Public Scoping Comments and Responses

ATTACHMENTS: Map 1. Paradox Trail Reroute

APPENDIX A:

Summary of Public Scoping Comments and Responses

The Bureau of Land Management Uncompahgre Field Office began work on the Paradox Trail Reroute EA in February 2011. The public scoping comment period was initiated at that time, with the public notified through press releases, web site postings, and letters sent to 19 individuals and groups who had expressed an interest in the Paradox Trail Reroute project. The Uncompahgre Field Office received comments from 12 individuals and organizations in response to the request for public input. These public comments were placed into subject categories and summarized with responses.

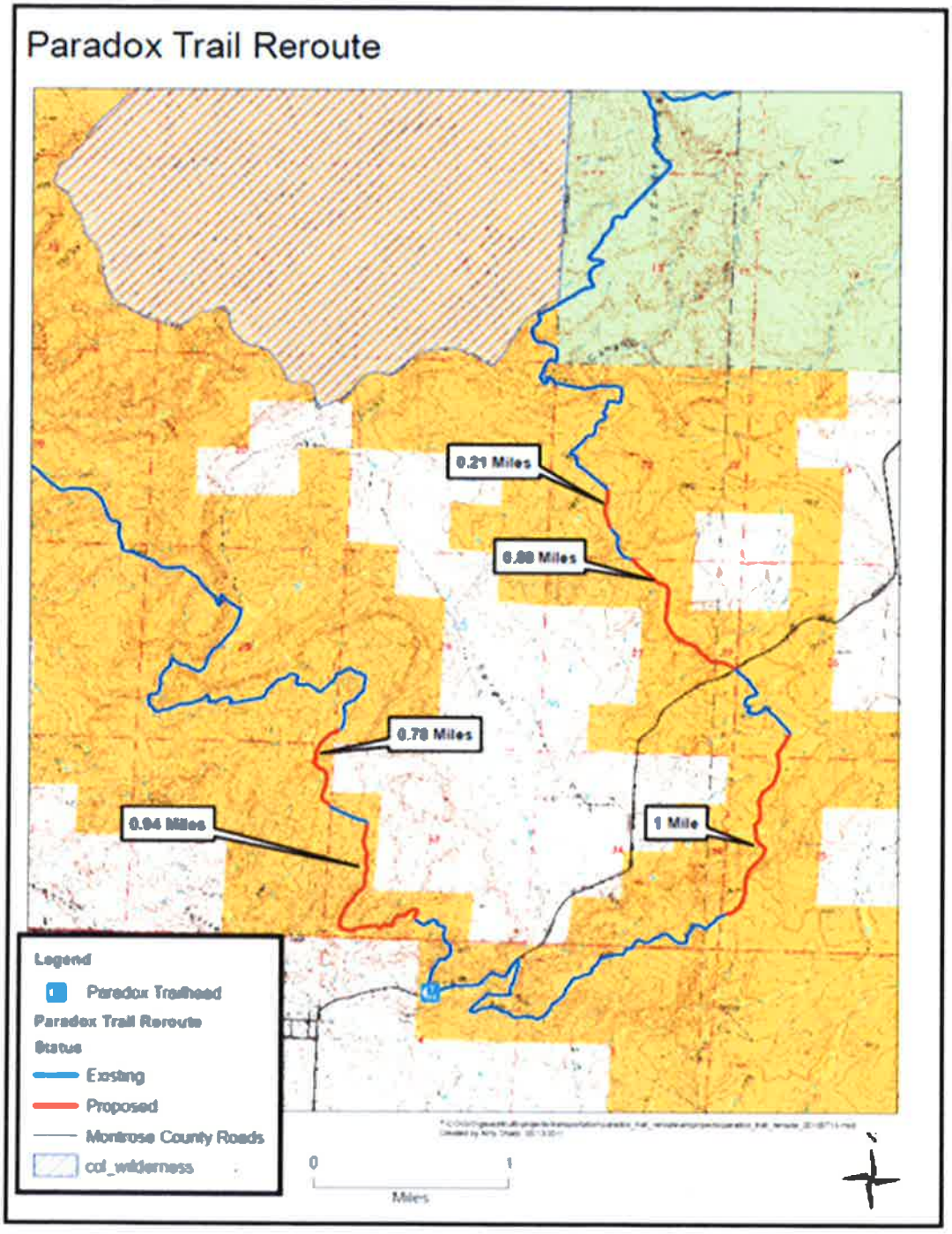
Discipline	Affiliation	Comment	Response
Access and Transportation	Nucla-Naturita Chamber of Commerce	Supports the proposal as it provides access from Nucla and expanded loop rides near town.	Thank you for the comment.
	Nucla-Naturita Chamber of Commerce, COPMOBA, Town of Nucla, Private	Addresses a long-standing trespass issue which will relocate the current trail off private property and keep motorized and mechanized users out of the Tabeguache Area.	Thank you for the comment.
	Private	The location of the trail goes through rough terrain, ledges, canyons, and rock formations which make it difficult to navigate through, control, and monitor use.	See Proposed Action - Trail Design Features, #1.
	Private	Why not use existing roads and trails and no new routes?	This proposal used existing routes to the maximum extent possible. Less than 4 miles of new routes will be constructed in order to connect existing roads and trails on BLM lands.
	Private	Why not use the county roads in order to avoid new trails being constructed near private property?	The Paradox Trail is a remote, backcountry trail system on BLM and USFS lands. This proposal kept the nature of the trail the same.
	Private	Numerous trails recently were closed to ATVs, no new trails	See Purpose and Need for the Action.

Access and Transportation		should be allowed.	
	Private	Concerns that route proliferation will occur due to proximity to Nucla.	See Proposed Action - Trail Design Features, #1. Constructing new trail segments between existing routes will encourage users to stay on the trail rather than travel cross country in order to connect routes.
	Private	Supports proposed reroute because it keeps users off the county road and provides a better experience.	Thank you for the comment.
	Private	You have not given the residents in T46N, R15W a fair notice that they will be impacted. This township and range was not included in the public scoping.	This proposal offered the opportunity to comment on the new proposed routes, not existing routes which are already authorized and open to the public. The new routes are located entirely in T46N, R15W.
Land Health and Threats	Private	Rerouting the trail close to Nucla will create more litter from recreationists and more social trails due to hunting. Leave the trail where it is currently located.	The trailhead will include a kiosk with information regarding Leave No Trace Ethics. Cross country on BLM lands is allowed for hiking and horseback riding. A well-planned trail system will encourage users to stay the trail.
Law Enforcement and Safety	Private	Concerns regarding trails being located too close to private property which could lead to trespassing – lack of enforcement to keep people off private land.	The trails are located entirely on BLM public land. See Proposed Action – Trail Design Features, #16.
Noise	Private	Concerns use will create too much noise close to private land, especially from motorcycles.	There are already existing roads and trails in the area with less than 4 miles of new routes to connect existing routes, all on BLM public land, outside of wilderness

			areas.
Recreation	Nucla-Naturita Chamber of Commerce, Town of Nucla	New trail location will provide additional opportunities for locals and tourists, offsetting use in other high impact areas	Thank you for the comment.
	Private	Recreationists do not mix well with cattle. Gates are left open and some new ones would need to be put in place with this proposal.	BLM lands are multiple-use. See Proposed Action - Trail Design Features, #11.
	Private	Why the need for such a long trail stretching from the Tabeguache Trail to Utah?	The Paradox Trail has existed for over 100 years. It offers numerous recreational benefits to multiple user groups. This EA addresses the need to reroute a portion of the trail due to a trespass issue.
	Private	Why not reroute the Paradox Trail through the Tabeguache Area?	The Paradox Trail is for multiple user groups, motorized and non-motorized. The Tabeguache Area is a congressionally designated area which is managed as wilderness, closed to motorized and mechanized travel.
	Private	Please postpone this decision until the trail is flagged on the ground so we know exactly where it is located.	The map provided in the public scoping comment period provided adequate information regarding location of the trail. It was also flagged and GPSed prior to on-the-ground surveys (May 2011) and will be pin flagged prior to construction. The trail is located entirely on BLM public lands.
	Private	Supports the trail system due to more opportunities, a clear trail system and needed	Thank you for the comment.

		trailhead.	
Recreation	COPMOBA	Supports the Paradox Trail overall which provides a valuable asset to Montrose and surrounding towns. We need to retain the use of this trail and institute needed reroutes.	Thank you for the comment.
Socio-Economics	Nucla-Naturita Chamber of Commerce, Town of Nucla	Support the reroute because it provides a diverse tourist base for the local economy; does not interfere with other community economic development plans; and increases tourism.	Thank you for the comment.
	Private	Concerns with spending money during hard economic times.	The project is funded by a grant from the Telluride Foundation.
	Private	Does not believe new trails near town will increase tourism or bring in more revenue.	See "Socio-Economics" section.
	Nucla-Naturita Chamber of Commerce	This project will increase environmental education and stewardship in the area.	Thank you for the comment.
Vegetation	Center for Native Ecosystems, San Juan Citizen's Alliance, Sheep Mountain Alliance	Consider potential impacts and conduct surveys of the reroute on the following rare and imperiled species and natural communities and sensitive areas: naturita milkvetch, little penstemon, Payson lupine, Western slope grasslands natural community, Highway 141 and 145 Colorado Natural Heritage Program Potential Conservation Area, and Naturita Upland Colorado Natural Heritage Program Potential Conservation Area	All proposed reroute sections and trailhead were surveyed for biological resources. See Proposed Action – Design Features, #18 and 19. Also see "Vegetation" and "Threatened and Endangered Species" sections in EA.
	Colorado Division of Wildlife	Weed control needed along trail and trailhead	See Proposed Action – Trail Design Features, #12-14. Also refer to "Invasive, Non-Native Species" section in EA

			analysis.
Wildlife, Fish, and Aquatic Habitat	Center for Native Ecosystems, San Juan Citizen's Alliance, Sheep Mountain Alliance	Consider the potential impacts of the proposed reroute on bald eagle and Gunnison prairie dog	All proposed reroute sections and trailhead were surveyed for biological resources. See Proposed Action – Trail Design Features, #18, 21, 22, and 23. Also see "Threatened and Endangered Species", "Migratory Bird", and "Wildlife, Terrestrial" sections in EA.
	Private	More people on the trails will impact wildlife, forcing them on private land and creating a hardship on private land owners.	Existing roads and trails already exist in the area. The amount of new trails proposed in this plan will not have a significant impact on wildlife. See "Wildlife Terrestrial" section in EA.
	Colorado Division of Wildlife	Reroute lies within Severe Winter Range and Winter Concentration Areas for deer and elk as well as winter range for turkey; however, use would be minimal during the critical winter months and therefore impacts should be minimal.	Thank you for the comment.


Paradox Trail Reroute
0.21 Miles
0.88 Miles
0.78 Miles
0.94 Miles
1 Mile
Legend
Paradox Trailhead
Paradox Trail Reroute
Status
Existing
Proposed
Montrose County Roads
col_wilderness
0
1
Miles

Map 1.